

Hardy Fern Foundation



HFF Poster

**President's** Message

### Sylvia Duryee

Fall again - the culmination of spring work, summer care and growth. What a pleasure to see the juveniles growing on to full maturity. In my garden this may take three to four years. More successes than losses sparks the desire to grow more. And how are yours doing? We'd love to receive an evaluation.

We are enjoying our alloted space in the hoophouse at the Rhododendron Species Botanical Garden but we still have needs. We hope to amend our watering problems by helping to design and install a watering/ misting system. This will make a large difference in our growing efforts.

We were pleased to be able to contribute to Steve Hootman's five week trip to

China. He is collecting seeds and spores for the R.S.B.G. and the Hardy Fern Foundation. It will be an exciting time when he returns and starts opening boxes and envelopes. We all wish that Steve has a rewarding trip. For us and the R.S.B.G. the rewarding will come later with the growing.

Sue and Harry Olsen attended Pteridophytes '95 at Kew Gardens as did our scientific advisor Barbara Hoshizaki and husband Takashi as well as HFF members Catharine Guiles, Susan MacQueen and Nancy Swell Sue reports that the public response to our new poster which was on display was enthusiastically positive. It was nice to have an international audience. We hope to reproduce this poster in a smaller size for display at our satellite gardens.

We send all good wishes to our members and friends for a good holiday season along with hopes for a comfortable winter dormancy for all of our pteridophytes.

P.S. A reminder: We are looking forward to progress evaluations from our satellite gardens for publication in an upcoming newsletter.

## **Dryopteris** Marginalis

#### James R. Horrocks Salt Lake City, Utah

The species name "marginalis" refers to the position of the sori on the pinnules. They appear near the margins, and it is this feature that distinguishes this species from a score of other bipinnate members of this genus. It is commonly known by several names: Evergreen Wood Fern, Leather Wood Fern, and Marginal Shield Fern, the latter name being the more descriptive. The range of this North American species is from Newfoundland to Ontario south through the New England states to Georgia, then across to eastern Kansas up through the Great Lakes area. It is more abundant northward.

Dryopteris marginalis is mainly terrestrial in nature, although occasionally epipetric, that is, growing on rocks. It is found growing around talus, on rock ledges, and in the open ground in shade. It prefers rocky hillsides in rich woodlands but sometimes frequents somewhat sterile soils and is often found growing in proximity to the Christmas Fern, Polystichum acrostichoides. These two species often hold erosion in check on

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## **Before You Go**

We strongly recommend a membership in The National Trust a British charity founded in 1895 to preserve places of historic interest or natural beauty. They currently oversee 1,000 ancient monuments, 200 historic houses, 160 gardens, 25 industrial monuments and protect over 590,000 acres of countryside including 550 miles of coastal property. Members receive a descriptive guidebook to these properties organized by county. They also receive free or reduced admission to these sites. We found it very worthwhile. For further information write to National Trust Membership Department, PO Box 39, Bromley, Kent BR1 3XL, England.

<u>The Gardener's Guide to Britain</u> by Patrick Taylor, Timber Press 1994 presents descriptions of "A personal selection of the best gardens, nurseries and specialist plant suppliers" and is immensely helpful. They too are organized by geographical area and are indexed by garden type and features i.e. ferns, herbs, alpines etc.

Someday we'll have an article on the British National Plant Collections program. For now, however, we recommend their book <u>The National Plant Collection Directory</u> published annually. There are an unbelieveable number national collections from hepatica and heuchera to the ferns, of course including polystichum, polypodiums, dryopteris etc. This little guide gives directions to the gardens as well as information on when the gardens are open, number of species and other pertinent details. This is published by the NCCPG, The Pines, Wisley Garden, Woking, Surrey GU23 6QB, England.

Finally, of course, fern books are in order and we particularly like <u>The Ferns of Britain and</u> <u>Ireland</u> by Chris Page, Cambridge University Press, London, New York 1982. Page's <u>A</u> <u>Natural History of Britain's Ferns</u> Collins, London, 1988 is especially useful for descriptions of habitats. Finally there is a more recent work, <u>The Illustrated Field Guide to Ferns and Allied</u> <u>Plants of the British Isles</u> by Clive Jermy and Josephine Camus, Natural History Museum Publications, London 1991 that has keys, descriptions and illustrations of the native material.

NOTE Travelers heading in the opposite direction to Southern Alpines '96 in Christchurch New Zealand in January might want to put Brownsey's and Smith-Dodsworth's excellent reference <u>New Zealand Ferns and Allied Plants</u>, David Bateman, Auckland, 1989 on their wish list!

# On the Pteridophyte Trail in England

Sue Olsen, Bellevue, WA

#### Part One

The lure of an escorted post-conference tour to Devon and Cornwall led my husband Harry and me to return our registration forms for Pteridophytes '95 Kew practically by return mail. (We were so prompt that we were the first ones signed up!) Our experience at the BPS Centenary conference and tour in 1991 left us eager to once again see England's ferns in situ and also by extending our trip beyond the scheduled program to visit private and public gardens. We were not disappointed.

The England we visited in mid-July was suffering from record heat and the worst drought in 250 years. This was to follow us during our entire trip of six weeks. We will indeed vouch for the heat and it was a relief to leave London and head for a more maritime southwest climate under the leadership of Dr. Chris Page recently retired from The Royal Botanical Gardens at Edinburgh.

By Harry's suggestion and with the group's approval our first stop en route was at Stonehenge. Any thoughts of the stones being surrounded by ferns were gone in a glimpse, however we were glad to have the opportunity to visit the historic site. From there we made our way to Devon where after several wrong turns we found the Heron House Hotel which was to be our operation central for the next several days. The beachfront hotel faced the English Channel and provided wonderful early morning and evening scenic walking opportunities.

All the while views from our bus window perch promised good things to come. For starters there were unmistakably large stands of <u>Phyllitis scolopendrium</u> growing in **deep deep shade.** (They will show up later in full sun, but I don't think these lush communities ever saw "the light of day".) Our first foray was to the research center and surrounds at Slapton. Here overlooking the spectacular coastal scenery we saw woodlands of Polystichum setiferum as well as more and more Phyllitis scolopendrium. Dryopteris affinis was also prominent and these ferns were to be the common species encountered during our travels. Going down (and I might add back up) 147 steps deeper into the woods we found Dryopteris dilatata and Drvopteris filix-mas. The highlight of the day, however, was the village center where amongst thatched roofed homes Polypodium interjectum, Asplenium trichomanes and various daisy like plants were entangled on the old mortared walls. We entertained the locals by lining up, macro lenses in hand duly recording their walls. Later in the day we crossed over a promontory to the next beach in search of Asplenium adiantum-nigrum. The stand had long since been overwhelmed by blackberries but Barbara Hoshizaki managed to ferret out some specimens from under the brush.

The next morning we went to the Berry Pomeroy Castle which when last seen by Chris was covered with the lime loving Polypodium cambricum (formerly P. australe). Meanwhile the castle had recently been "cleaned up" and gone were the polypodiums!! (Ferns on castle walls have a way of disappearing like this ..... we had a similar experience returning to "under restoration" Tintern Abbey.) There were a few species tucked in out of the way spots so we enjoyed them and left the rest to our imagination. The highlight of the day, however was a stop at the village of Chudleigh. Here the sunny walls of the town and especially the graveyard were covered once again with Asplenium trichomanes, this time in the company of Asplenium ruta-muraria, Phyllitis scolopendrium and Ceterach officinarum. These were exciting to see, but even more so was our discovery of a tombstone (for Betha and Ellen) beautifully carved to resemble an old wall with a fern frond growing out it. (If we foreigners looked strange photographing the wall in Slapton, you should have seen us on our knees at the tombstone!) It was hard to leave but the afternoon called for a visit to the Yarner Wood National Nature Reserve in Dartmoor National Park Here under oaks and conifers we found

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some of the acid loving ferns as we walked through the valley and along a natural stream. <u>Dryopteris aemula</u> with light green fronds, tall specimens of <u>Oreopteris limbosperma</u>, and <u>Osmunda</u> regalis, as well as <u>Dryopteris expansa</u> and the hybrid between <u>Dryopteris expansa</u> and <u>Dryopteris dilatata</u> were all studied and compared.

It was time to move on to Cornwall with several stops en route. Our first chance to risk life and limb was at Liskeard where Asplenium bilottii was growing on the shady banks of a narrow lane. The latter were quite standard and the bus backed up more than once during our trip to "yield" to oncoming traffic hidden deep in the hedge rows. Rose Murphy a retired school marm joined the tour at this point to assist for the next several days and was quick to point out the already familiar dryopteris at the afternoon stop in Lower Gurdon along with Equisetum fluviatale, Polypodium vulgare, Dryopteris carthusiana and Pteridium aquilinum var. atlanticum (Page). I have not mentioned Pteridium aquilinum (bracken) or Athyrium filix-femina (lady fern), but be assured they were everywhere. In fact the bracken appears to be slowly devouring the entire British Isles along with blackberries.!

Another day and another woodland, Lamorran woods yielded more finds including several Dryopteris affinis subspecies and Blechnum spicant. The group lunched in the popular fishing village of St. Mawes where we had our only encounter with Adiantum capillus-veneris in the churchyard. We seemed to be hanging out in cemetaries and the afternoon was no exception at the charming church in St. Just-in-Roseland. The gravestones were surrounded by huge stands of Dryopteris affinis with an occasional specimen of D. a. subsp. robusta. In another portion of the garden were healthy swathes of a Blechnum sp.! (tabulare, chilense, magellanicum and cordatum were all suggested and discussed as correct names but there was no consensus...lovely plant though!) The dominant "companion" plants to all of these ferns throughout the countryside were hydrangias of all forms and colors and crocrosmia species and cultivars.

The next morning we visited Chris' beloved Penjerrick garden. This 25 acre estate has been developed by the Fox family over a period of 200 years and there, as promised, were the 200 year old tree ferns (Dicksonia antarctica) for which the garden is known. Several of the dicksonias are believed to be the oldest and largest in cultivation. Our moisture loving mystery blechnum appeared again colonizing along a stream bed along with huge specimens of gunnera and <u>Osmunda regalis</u>. (Someone should introduce <u>O. cinnamomea</u>!) The afternoon excursion by contrast was to Kynance ous was one of the high points of the trip and many wished we could continue along the coast.

On our last day we went to an abandoned mill where explosives were once made for the Cornish tin mining industry. The woods contained many of the ferns that had been enjoyed on the trip and it was a fitting summary and conclusion. The group abandoned ferns for the afternoon to enjoy sightseeing in Falmouth where many of us were entertained by fleets of sailboats participating in a popular local regatta. As a farewell celebration we

spent the evening at a

wine and cheese gala at

the estate of Chris' sister-

in-law'. It was a fitting

ending to a very busy

week. Chris wrote that he

hoped we'd return with

happy memories and

many photos and we can

say yes on both counts!

Part Two will explore fern

gardens and habitats that

we enjoyed after the tour

including a return visit to

some of the places de-

scribed on the 1991 tour.



Tombstone - Chudleigh. Photo by Harry Olsen.

Cove down at the tip of the Lizard Peninsula the southern most point in England. One has to think that Kodak film was developed for just such a spot with picturesque windswept cliffs and the turquoise/ royal blue Atlantic Ocean rolling in to join the English Channel. The dominant plant in the area was spiny gorse .... thank goodness we don't have to cope with that weed. Much of the point's rock is serpentine and our specific goal was to find the serpentine form of Asplenium adiantumnigrum which indeed we did. A bonus at the end of the trail was the discovery of two plants of Asplenium marinum (more about this in Part Two) tucked in the rocks in deep shade. Each had only a few leathery fronds, but we were all pleased with the find. The hike while not strenu-



## American Fern Society Fern Foray

by Robin Halley -Editor The Fern World Co-published with the San Diego Fern Society

Friday, 7:03, Phoenix, August 4, 1995. 103° It's gonna be a scorcher. A normal summer day in this sun-beaten town...and I have a job to do. Who am I? Terry Dologist, Fern Detective.

A coupla weeks ago I got a hot tip (...and it is hot) about a coupla joes that can lead me to more ferns than I can shake a collecting bag at. My job bein' what it is, I couldn't stay away.

Friday, 7:59. 105° Pull up to the Super 8 Motel Phoenix Metro/Central. Already a motley crew of fern finders is gatherin' 'round a van that looks smaller than 11 people and their bags. After handshakes all around, we get on the road. Turns out the van is comfy and *air conditioned*.

The guys headin' up this expedition, Mike Windham and George Yatskievych, 'splain as to how, since the usual Arizona monsoon hasn't hit this year, we're gonna have to follow different leads. Ya gotta know the territory.

Friday, 10:30. Gila County, Mazatzal Mountains, Iower Barnhardt Canyon. HOT. We're at 4100' and it's still hot. Lucky it's early. We pile out of the van like bloodhounds on a chase...sniffin' through the underbrush. Evergreen woodland with mostly oaks, junipers, and pines. The first cry goes up. A fern is spotted.

I seen a lot of ferns in my time. But this is a fern just like a fern you'd see that hadn't been watered for a long time. Curled, withered, scorched. "Oh," says Mike, "*Cheilanthes yavapensis*." I believe him. Of course, with a fern in that condition, he coulda said *Cheilanthes* anything and no one would have known different. The next ferns are more recognizable...cliff-brakes...Wright's cliffbrake (*Pellaea wrightiana*). Next, the spiny cliff-brake (*P. truncata*)... and the hybrid *Pellaea* x "wagneri." Also, more lip ferns (*Cheilanthes*) with *C. covillei, C. fendleri*, and *C. lindheimeri*. Most are



"crispy critters," but occasionally we see one with a coupla healthy fronds. Mike points out some plants that look like shriveled gold. These are goldback ferns (*Pentagramma triangularis* subsp. *maxonii*). We see both the triploid and tetraploid cytotypes. (Don't ya love it when I talk scientific?)

We move up to 4500 feet, into a riparian community. In plain talk, that's plants associated with water, usually a river or lake. Here, we find walnut, plane trees, hackberry, and a lady near a spring. The lady...is a lady fern. Arizona desert...Athyrium filix-femina. Go figure. Alsostalked and found, bracken (Pteridium aquilinum) and giant chain fern (Woodwardia fimbriata). We wend our way back to the van, following a two-inch hose designed to bring spring water to grazing cattle a mile or so below. By the time we get to the van, water ... or anything else wet and cold...sounds good to us.

The lava sits on top of ice caves which enable a cool wet wind to blow up though the lava . . .

Back in the van, heading for a lunch stop. We move out of cactus country, into yellow pine forest on the Mogollon Rim.

Friday, 1:00. 7245' Mid-80s. Practically frigid. We pull up to what's left of Baker Lake. Never much more than a big pond, in deep summer it seems mostly mud. Eleven guys and gals tromping through mucky mud looking at water clover. Mike L-R. George Yatskievych, Lisa Hooper, John Mickel, Don Farrar, Alan Smith, Sue Hollis, Carl Taylor, Dan Palmer, Wendy Born, Mike Windham.

First Stop Barnhardt Canyon.

tells 'bout how it used to be *Marsilea vestita*, but now it's *Marsilea mollis*. Finding ferns is fun. Keeping up with names is work. A little ways away we find more bracken. John Mickel and Dan Palmer talk about whether it's variety *pubescens*. No decision is reached. Our stomachs demand lunch. George and Mike lay out the sandwich spread and we dive in.

Friday, 2:00 7400' Still nice. Major stop 2 for today. We're at Dane Canyon and we hear there are ferns galore. This is a Montane Conifer Forest dominated by spruce, fir, and maple. We follow the fire roads down into the canvon. My wellhoned detective sense leads me right to 'Cystopteris Rock." [Or was it luck? No matter.] This rock is just covered with brittle or bladder ferns, as Cystopteris are called. Here we fern hounds find the southwestern brittle fern (Cystopteris reevesiana), the Utah brittle fern (C. utahensis), and the very rare hybrid, C. reevesiana x C. utahensis. Under and around other rocks nearby, we find the western polypody (Polypodium hesperium) and the purple cliff-brake (Pellaeax atropurpurea). After sliding ... er, hiking further down the canyon, we find a stream bed lined with more Cystopteris, the northern holly fern (Polystichum lonchitis), the lady fern (A. filix-femina), and the male fern (Dryopteris filix-mas). On the way back out, Sue Hollis spots a lonely maidenhair spleenwort (Asplenium trichomanes) or two.

Friday, 6:00 Somewhere in the 90s and the 6000s. A quick stop at Mormon Lake just for the view. Orange, red, and purple tint the thunderheads to the west. To-

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ward the horizon, rain, occasionally interrupted by lightning, streaks down but never reaches the ground.

Friday, 7:00 7500' High 70s. The gang settles into the Flagstaff Fairfield Suites. Dinner at 7:00 at a local Mexican restaurant...with live music...then back to our rooms to pore over the treasures gathered during the day. Did you know that if you put shriveled *Cheilanthes* fronds into a plastic bag with some water overnight, they look almost like real fronds in the morning?

Saturday, 7:00. Day two. Clear and bright. Everyone's eager to get back on the trail. After a continental breakfast, we beeline north for today's first stop, the south slope of Elden Mountain.

Saturday, 9:00. 95° Beginning to heat up again. This is no sissy stop. Through thickets. Up ravines. Over tall boulders clamber the super-sleuths in search of the wily ferns. Carl Taylor and Don Farrar lead the way. We see more P. wrightiana, then Eaton's lip fern (C. eatonii) with some actual live fronds, the ebony spleenwort (A. platyneuron), the black-stemmed spleenwort (A. resiliens), the western cliff fern (Woodsia oregana), and Woodsia neomexicana. About here I noticed that most of the ferns we are finding have "cliff" something in their names. They should also have had "hot" something ... Back to the van and the cold drinks.

Saturday, 11:00. 100° A special added attraction. The Sunset Crater lava flows. Mike says "The tour leader's nightmare." Here we're tracking down a very elusive fern, the forked spleenwort (A. septentrionale). Faced with sharp, unstable glass-sharp lava, Sue Hollis proves to be the only person on the trip in her right mind and volunteers to patrol the perimeters. The other ten heat-stroke victims clamber out onto the lava. More surprises. The lava sits on top of ice caves which enable a cool wet wind to blow up though the lava. As a result, a variety of ferns grow in this nearly barren, hostile environment. As we spread out to corner A. septentrionale, we find lip ferns (C. feei and C. fendleri), cliff ferns (W. oregana, W. neomexicana, and W. oregana x W. neomexicana), the male fern (D. filix-mas), and a brittle fern (possibly *C. fragilis*), but no forked spleenwort. It almost feels like a snipe hunt. We all head back, saddened and enlivened at the same time. Just as most of us scramble out of the lava flow, "We found it." Alan Smith and Lisa Hooper burst out from between two huge cinderrocks carrying their one-frond prize. No one was ready to "go back in."

Saturday, 1:00 HOT! Hunger is setting in again. We take it on the lam to the relative cool of Oak Creek Canyon and lunch overlooking Oak Creek. Not much in the way of fernery, but great fixin's again. Thanks, George. A couple of horsetails (*Equisetum arvense, E. x ferrissil*) and some bracken later and we're back on the road.

Saturday, 3:00 103° Heading back toward Phoenix. Talking about a good coupla days and catching an early flight. Suddenly, George turns the van off the highway and starts down a bumpy, rocky, dusty, dirt road. This is cactus country. Mike calls it Sonoran Desert community featuring prickly pear, jojoba, ocotillo, palo verde, and cactus. We pull to a stop at a wash near a sign that says "Bumblebee 4." Is that a partial score? "Major stop 3 for today," explains Mike. He must take us for fools. There's a rush for the door. He's right.

Wendy Born heads the pack as we wander off down the wash. Mike leads us to a series of cheilanthoid fern and fern allies. Cloak ferns (*Notholaena californica* and *N. standley* isubsp. "mazatzalensis"), lip ferns (*C. parnyi* and *C. yavapensis*), *Astrolepis cochisensis* subsp. arizonica (one of very complex *A. sinuata* complex), and a pretty little Selaginella species (*S. arizonica*). I hunt fruitlessly for Parish's and Wright's lip ferns (*C. parishii* and *C. wrightii*). An hour later, George and Mike are trying to herd us, toasted but reluctant, back into the van.

Saturday, 5:00 104° Phoenix International Airport. Good byes to those not going on to San Diego and the AIBS conference. Making plans for next year. "Leave no fern before its time." Or something like that.

## **For Your Information**

While at the conference at Kew we met Dr. Kunio Iwatzuki author of <u>Ferns and</u> <u>Fern Allies of Japan</u>. He advises that the English version of the book is still pending, however (and unfortunately) the magnificent photographs for which the book is acclaimed will not be included in the English edition.

Lee Moore "The Adventurer" has asked that I announce that he leads expeditions to the Peruvian Amazon. These safaris are limited to 15 people and last for 10 days. The price, inclusive from Miami, is \$2,600. For further information write to Lee at P.O. Box 822, Miami, FL. 33156. Phone (305) 274-3980.

The A.I.B.S. (American Institute of Biological Sciences) meeting and American Fern Society annual meeting will be in Seattle next August 4 - 7 complete with pre-conference field trips. Your HFF is planning an excursion. There will be more information available as plans are firmed. If you are interested let us know.

In response to our request for garden reports, Catharine Guiles of Maine has written, "I fear I must report three deaths and one case of ill health. June and July 1994 were very dry, December 1994 was warmer than usual, and the snow cover for last winter was not heavy. All this placed stress on perennials, and I lost three ferns in my Blue Hill, Maine, garden, about which I wrote in 1992. These were: the Dwarf fimbriate Lady Fern (Athyrium filix-femina'Fancy Fronds'), the Crested male fern (Dryopteris filix-mas 'Cristata the King') and the Fragile fern (Cystoperis fragilis). The first two never did thrive, though they lasted through the two previous winters. The third, I have concluded most likely died because of inadequate winter protection and perhaps because of stress from dry conditions during the growing season. After the winter of 1992-93, I lost the Bulblet fern (Cystopteris bulbifera); however, in the spring of 1994, it reappeared and it also survived last winter." Thanks for the report Catharine!

#### Dryopteris Marginalis continued from page 37

barren shaded slopes. Dryopteris marginalis, more often than not, grows as a solitary plant and is quite striking by itself. As the common name implies, it is quite evergreen.

Description: The erectrhizome is among the largest of any in the genus Dryopteris, often rising two inches above the surface, clothed in chaffy brown scales. The rhizome does not branch or divide but remains solitary. The uncurling crosiers are covered rather heavily with coarse pale reddish-brown scales. The sori, although not yet quite mature, are quite well defined and easily observed near the margins of the pinnae as they unfurl. The fronds are twelve to thirty inches long, bipinnate, and change in color from light green to a gray-green or blue-green as the summer proceeds. The pinnules are crowded, oblong and somewhat scytheshaped with rounded tips. The fertile fronds, which do not differ in outline from the sterile, are almost completely covered with sori which are spaced in a uniform manner near the margins of the lobes. The submarginal indusia are kidney-shaped and at first are nearly transparent to greenish-white, later seemingly changing color, being influenced by the ripening brown spores.

Culture: A very adaptable fern for the garden, at its best in deep, stony, slightly acid, humousy soil that is well drained but kept moist. The crown should be planted so as not to be covered with soil, but exposed. A top dressing of rotting leaves around the crown is beneficial. This fern will grow in full shade to open shade, taking some sun. Often thought of as a rather common fern, it can be used with great effect among boulders and even next to the exposed roots of large trees. It is probably more striking as an individual plant than in a colony. Several species of Dryopteris seem happier if grown as a single specimen. Besides D. marginalis, other examples of this solitary habit include such species as D. atrata, D. lacera, and D. uniformis, all exhibiting a single erect crown which seldom or never divides. The best rule of thumb is to observe how they grow in nature and then allow them the same

freedom in the garden. *D. marginalis* is certainly one of the "old dependables" in any garden and should be in every collection of ferns.

## **The 1995 Spore Exchange**

The exchange is alive and well again this year. We have had an increase in donations. This gives our members a greater diversity of ferns to choose from. On the other hand we had a decrease in the number or requests. Members are encouraged to get out there in their gardens agrowing ferns. Come ya'll git plantn'!!

#### Spore List Key for Growth Habits

1	Rare	R	Rocky Soil
2	New Listing	J	Epiphytic
3	Few Spores	В	Tree Fern
A	Alkaline Soil	С	Climber
Z	Acid Soil	G	Spreading Habits
D	Dry Soil	E	Easy to Grow
N	Normal Dampness	Q	Difficult to Grow
W	Wet Soil	\$	Green Spored
L	Soil Specific	\$\$\$	Green Spored
			with Fresh Donor

#### The other listings are:

Zone which lists the most northern zone that a fern has been reported to grow. If its zone is unknown I put 99

<u>Size</u> the largest size the fern will grow under ideal condition.

<u>GROth habits</u> the key above is selfexplanatory.

<u>Coll. Site</u> is where the fern was collected if its is collected in the wild.

ORIGIn is the ferns natural habitat.

**Donor** lists the donors of the various spores. It is listed with the year the spore was donated beginning with the most recent; then the donor number. There is a space between successive years.

If you want spore from a particular donor or collection site you must specify which one.

Much of the information in the List was collected through the hard work of Brian Aikins, and Robert Luis Muller. If any member has any reliable information that should be added to, or changed in, the list please forward that information with your spore donation or request. Many Thanks!

Another reminder we can always use more spores. This last year has been a good one for donations but the viability of the exchange depends on a constant flow of fresh spores from the membership. So please send in whatever you have time to collect. Thanks!

To order: Please print your selections clearly in alphabetical order using the Botanical name. Include 25 cents for each fern requested (check payable to the Hardy Fern Foundation) and a selfaddressed stamped envelope. No charge for requests from overseas, but please enclose an International Postal Return Coupon to help with the cost of mailing the spores. Maximum order is 25 packets per year.

> Mall Requests to: Wayne "Bubba" Baxter 307 Riverdale Cir. Stephenson, VA 22656 540-667-0139



Dryopteris marginalis. Photo by Kim N. Durrant, SLC, Utah.

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## DONOR LIST

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Turney	Dr. T.W.	53
VandeMoes	Dr. Cor	54
Vandermast	Mrs. Sandra	55
Visentin	Suzette	56
Vulcz	Les	57
Wakeman	Bruce	58
Weeks	Elmo	59
Kaye	Reginald	60
Adkins	John	62
Agostinelli	Don	63
Atterbury	Diane & Ken	64
Boyles	Roger	65
Byer	Dorothy	66
Cava	Edmund	67
Clause	Eileen	68
Concannon	Michael	69
Denkawitz	Lothar	70
Drife	Don & Joyce	71
Ehlers	Joachim	72
Game	John	73
Gamlin	Robert	74
Kluge	Johan	75
Graber	Jean	76
Gustin	Laura	77
Hallman	Edward	78
Hughes	David	80

Kato	Yoshio	81
Kawabata	Shuzo	82
Knousa	John	83
Kuheana	Halyna Mrss	84
Lamb	Dorothy	85
Lellinger	Dr. David B.	86
Marley	John & Judy	87
Mıyazaki	Hiroki	88
Moscetti	Pamela	89
Sauls	Craig	90
Sheffield	Dr.Elizabeth	91
Skula	Frank Mrs	93
Sonter	Val	94
Straney	Dr. David	95
Sullivan	Judith	96
Thompson	John	97
Wingard	Christian	98
Young	Dr Bruce	99
Baird	Marge	100
NimmoSmit	Margarat	101
Hirsch	E. MD	_102
Pillar	Richard	103
Laughland	Bryan J.	105
White	Barry	106
Edney	Beverty	107
Guiles	Cathenne	108
Bates	Phyllis P.	109
Halley	Bob	110
HFF		111
AFS/NYBG		112
Burnett	Naud	113
Punter	J.C.	114
Gould	Gretchen	115
Osorio	Rufina	116
Faely	Joan	117
Farrar	Dr. Donald	117
Thorut	Chanin	118

Link	Elva C,	119
Birkrem	Dr Alt	120
Sasashi	Mrs Hiroko	122
Feuerstein	Betsy	123
Garrett	Michael	124
HFFLakewol		125
Ney	Jason	126
Evers	Ted	127
Rollins	James A.	128
HEIM	MICHAEL	129_
Barton	Loyd & Vera	130
Muller	Robert	131
Constantino	Sandra	134
Tavernier	Wim	135
Batten	D.J.	136
Farden	Cynthia	138
Schieber	Jack	139
Smith	Alan	140
Perry	Jesse	142
Reed Jr	Wally	143
Lundberg	Jean	144
Mandeville	Sue	146
Hinde	Dr. Howard	147
Tonsing	Mary Ellen	148
Quattrochi	Judy	149
Nielson	Jens Henrik	150
Fairbourne	Marlena	151
Huge	Mogens	152
Hammerbar	Owen	153
Nash	Brian E.	155
McGill	Peggy	156
Coppins	Stephen	157
Minne	Claira	158
Sherlock	Nancy	159
Hoskova	Stanislava	160
Sliger	Dean	161
Yansura	Daniel	162
Hernington	Ann	163

HFF	GENUS	SPECIES	CVR	COM. NAME	PK	z	sz	E GRO	COLL.SITE	ORIG	DONOR
1 1	Adiantum	aleuticum		Aleutian westrn	25	4	12	TKGEL	Wa.	PacNW Jap	95/10 94/97
2	Adiantum	aleuticum	serpentina ecotype	aleutian westrn	10	2	12	GJTEL	cascade mts	alaska,nw usa	92/25
3	Adiantum	pedatum		AmerMaidenhairFiveFinge	<b>#</b> 70	2	20	ENSZK		US Jap	94/18
4	Adiantum 1	aleuticum	subpumilum		3	4	12	ZSNEG		NW N.hem	94/20
5	Adiantum 1	Pedatum	Subpumilum	Maidenhair Fern	10	3	1	NSZ		US	
6	Adiantum 3	capillus-veneris		Venus.SouthernMaidnhaid	re4	7	24	EASNH		Pantrop	94/9
7	Allantodia	Australis			8	7	48	BTWK	Mt Garret, Tasmania	AusNZ Tasm	
8	Arachniodes	aristata		EastIndianHolly.PricktyShi	dið	6	36	SDKNT		Easia, aust.	94/156 93/9
9	Arachniodes	aristata	variegata	EastIndianHolly.PricklyShi		16	36	SZND		Easia, Aust.	94/10
10	Arachniodes	cavalerii		1	2	15	40	1		JapChTaiw	92/36
11	Arachniodes	migualiana			18	5	24	GK		Easia	95/12 92/43
112	Arachniodes	simplicior			110	6	130	EKTZ		Easia	95/160
13	Arachniodes	simplicior	vanegata		5	7	30	SNE		Easia	94/145
14	Aspidium	aculeatum			15	6	1				94/9
15	Aspidotis	Idensa	1	Indians draam	11	4	18	DZSUJ	Wa.,Eagl creek	Wusa	95/1 93/7.97
16	Asplenium	adiantum-nigrum		Black spleanwort	50	6	14	RANT	Hawaii,Switz	Eur.NA.At	95/9 94/45
17	Asplenium	adulterinum			114	15	18	RAD	Bohem.	EurTibet	94/9.12.45
18	Asplenium	billotii		LanceolatumSpleanwort	110	15	10	QZTK		Eur	95/10 94/9
19	Asplenium	bulbiferum		mother spleenwort	12	6	36	NJZHE		Aus.NZ	95/9 94/141
20	Asplenium	castanaum		Thomas Spice mon	4	7	10	INK		Mex	94/34
21	Asplenium	ceterach		Rusty back tern	12	16	18	DKANT		Eur,india.Af	94/9 92/9
22	Asplenium	cuneifolium			116	6	1	B	Bohem,CzechSwtz	Eur	94/45
23	Asplenium	tissum			6	6	8	BAN	Germ	Wasia	94/9,45
24	Asplanium	flabellifolium		nacklace farn	16	17	112	GSNKJ	Victoria, Aus	Aus NZ	95/53
25	Asplenium	fontanum		SmoothRockSpleenwt.	18	15	15	ZNRSG		Eur	94/9,45,97
26	Asplenium	Hybridum		1 Chippenn lookopiceinni.	2	17	10	ZK		Medit.	10
27	Asplenium	incisum			15	4	10	ZYK		NE Asia	94/45
28	Asplanium	marinum		sea spleenwort	4	16	10	QNTR		EurAt	94/9
29	Asplenium	obovatum		Lanceolate spleenwort	15	17	112	ATNH		EurMadStHeina	92/104
30	Asplenium	obovatum	lanceolatum	Lanceolatum spleenwot	110	17	16	ATNH	Switz	Eur	195/9 94/154
31	Asplenium	platyneuron	In the second se	Ebony spleanwort		_	<u> </u>		N.Va,NJ,Me	E USA	
32	Asplenium	pseudotontanum			3	4	19	SRT	14.4 4,140,140	Eurasia	94/9.147.97
33	Asplenium	rhizophyllum		walking tern	12	4	6	ANTKO		NAm	94/9.8
34	Asplenium	ruta-muraria		Wall-rue	150	4	15	IQANU	Wales, Eng, Switz	N. Hem	
35	Asplenium	scolopendrium		harts-tongue, scollies	18	6	112	ANSKO		NHem	95/9
36	Asplenium	Scolopendrium	Supra marginatum	Harts Tongua fm	110			ANSKO			94/150,152,97
36	Asplanium		Supra marginatum	Maidanhair spleenwort	50		19	ANTKO		NHam	94/155
38		trichomanes	Cristatum	Maidanhair spleenwort	1		9	ANTKO		Cosmo	94/9.38.97
39	Asplenium	trichomanes	Incisum		20			ANTE			94/45 93/7,36
_	Asplenium	trichomanes		Incised Maidenhair	15				Cuitz	15	94/36.45
40	Asplenium	trichomanes	quadrivalens .	Maidenhair spleenwort	4		9	ANTE	Switz	Eur	95/9 94/45.154
41	Asplenium	trichomanes	trichomanes	Maidenhair spleenwort		2	1-	ANTE	Switz	Eur	94/45
42	Asplenium	viride		Green spleenwort	120	4	6	QARNK	AlpsAus	N. Hem	95/2 94/9,45

#### Fall 1995

# HARDY FERN FOUNDATION NEWSLETTER

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	GENUS Asplenium 1	SPECIES Dahihousia	CVR	COM. NAME	2 2	4	SZE	GRO	COLL.SITE	ORIG Azores	DONOR
	Asplenium 1	1									94/9,45,154
	Asplenium 1	onopteris				6		RZKNT	Curte links		
	Asplenium 1	septentrionale			70	4	6	OZDTK	Switz, Italy		<u>94/9.45.152</u> 95/9
			septentnonale		1	4		OZDT			
	Asplenium 1	Trichomanes	Hastatum		3		9	ANTE	Switz		94/45
	Asplenium 1	x ebenoides			10	5	12_	ANRK			95/163.1 93
	Asplenium 1 3	trichomanes	Pachyrachis		6	2	9	ANTE			94/45
	Asplenium 1 3	xalternfolium			3	5	3	R	Germ		94/45
	Asplenium 1 3	x lusaticum			1	5			Germ		94/45
	Asplenium 1 3	x poscharskyanm	L		3	5			Germ		94/45
	Asplenium 2	Platyneuron	Incisum		5	4		DAENT			94/131
	Asplenium 3	ruta-murana	dolomiticum		1	4	5	QANU			94/45
5	Asplenium 3	trichomanes	lucanum	Maidenhair spleenwort	3	2	9	ANTE			92/45
	Astrolepsis	sinuata		1	5	6	10	AUDK			95/11
7	Athyrium	angustum	rubellum	Nothem lady fem	3	3	48	ZNTKE		N.Hem	94/141
8	Athyrium	asplenioides			20	4		EKNZS		SE USA	94/9 93/9 9
	Athyrium	crenulato-serrulatum	1		1			SNKG			92/12
	Athynum	deltoidofrons			5						93/45 92/8
	Athyrium	distentifolium			8			RTVK	Germ.,Austria 1800m		95/12
	Athyrium	filix-femina			40						
	Athyrium	filix-femina	Bomholmiense		10	3	40	ZNIKE	14. V 8, 5 VV MICH	NE N. Hem	94/144.149
				lady fem		3	40	ZNTKE			
	Athyrium	filix-temina	cnstatum	lady fern	15			ZNTKE			95/141 94/1
	Athyrium	tilix-temina	Curtum cristata		3	3	48	ZNTKO			94/45
	Athyrium	filix-femina	Cyclosorum	norhtwestern lady	10	3		ZNTKE	Oreg		93/97 92/9
	Athyrium	tilix-femina	Frizelliae	Tatting fem,Lady farn	10			ZNTKE			95/2 93/7,9
	Athyrium	filix-temina	Minutissimum	lady fem	20			ZNTKO		N. HEM	95/2
9	Athyrium	Filix-famina	multifidum		3	3	48	ZNTKO			94/141
0	Athyrium	filix-femina	redstipes		5				Hamburg,Germ		93/12
	Athynum	filix-femina	rubellum			3	48	ZNTKE	N.Va,Me		94/5 93/3
	Athyrium	Filix-temina	Rubnpes		8			ZNTKO			94/148
	Athynum	filix-femina	Sitchense	lady fem	4	3	48	ZNTKE		N. HEM	
		filix-femina	Vemoniaa cristata			3	136	TANTINE			92/49,103.
	Athynum		ventoniaa cristata			3	30	ZNTKE			92/49,103, 94/9
	Athyrium	japonicum		Black Lady fern	2			EVATN			
	Athynum	niponicum						ZNTV			94/9 93/18
	Athynum	niponicum	Pictum	Japanese Painted Fern	60				SW Mich		94/18
8	Athynum	niponicum	Subpulim		10	4	18	ZNTV		Easia	
9	Athyrium	otophorum		auriculate lady fern	20	4	24	SKENT		Easia	93/3.10.10
0	Athyrium	otophorum	okanum	Aunculate,Eared lady fern	5	4	20	SKENT			95/141
1	Athynum	pycnocarpon		American Glade Fern	20	4	48	ANTVK			94/52.5.120
	Athynum	Thetypteroides			20	4	36	TWZV	Ma		94/5,120 9
		vidalii	1	Silvery Glade Fern, Silvery	20			TKE			94/45 92/9
	Athynum								Jap		
4	Athynum	yokoscense			4		10				94/45 93/3
	Athyrium 2.3	iseanum	angustisectum		1		24				94/9
	Athyrium 3	alpestra			3			QRSKV		EurN.AM.	95/1 94/9
37	Athyrium 3	filix-femina	Corymbiferum	lady fern	6		48	ZNTKO			94/45
38	Athyrium 3					1.4	140		1	All Loren I	
		Filix-temina	Polydactylus Darley Dale	Lady fem	3	4	48	ZNTKO		NHem	94/45
				1				ZNTKO			
9	Athyrium 3	filix-femina	Polydactylus Darley Dale Victoriae	1	1	3	48	ZNTKE		N. HEM	95/141 94/
9	Athyrium 3 Athyrium 3	filix-femina iseanum		1	1 3	3 6		ZNTKE		N. HEM Ja,Tai	95/141 94/ 94/9 92/36
9 10	Athyrium 3 Athyrium 3 Athyrium 3	filix-femina iseanum rubripes		Queen of Green,Lady fam	1 3 1	3 6 6	48	ZNTKE SK		N. HEM Ja,Tai Sibena	95/141 94/ 94/9 92/36 94/45 93/9
9	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3	filix-femina iseanum rubripes spinulosum		Queen of Green,Lady fam	1 3 1 4	3 6 4	48 24 24 24	ZNTKE SK SNKE		N. HEM Ja,Tai Sibena EAsia	95/141 94/ 94/9 92/36 94/45 93/9 94/45
9 10 11 12 13	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum	filix-femina iseanum rubripes spinulosum discolor		Queen of Green,Lady fam Spinulosa Lady frn crown farn	1 3 1 4 20	3 6 4 7	48 24 24 38	ZNTKE SK SNKE WTKN		N, HEM Ja,Tai Sibena EAsia NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9
19 10 11 12 13 14	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor minus		Queen of Green,Lady fam	1 3 1 4 20 20	3 6 4 7 6	48 24 24 38 40	ZNTKE SK SNKE WTKN WOTK	AukNz	N. HEM Ja,Tai Sibena EAsia NZ Aus, NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9
19 10 11 12 13 14 15	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor		Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern	1 3 1 4 20 20 5	3 6 4 7 6	48 24 24 38 40 12	ZNTKE SK SNKE WTKN WOTK WUK		N. HEM Ja,Tai Sibena EAsia NZ Aus, NZ Aus, NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9 95/9,106 9
9 10 11 12 13 14 15 16	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor minus		Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Albine@Materfern_LittleHard	1 3 1 20 20 5 10	3 6 4 7 6 5	48 24 24 38 40	ZNTKE SK SNKE WTKN WOTK WUK GUOW	AukNz	N, HEM Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9 95/9,106 9 93/9.38.97
9 10 11 12 13 14 15 16	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii		Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Albine@Materfern_LittleHard	1 3 1 20 20 5 10	3 6 4 7 6	48 24 24 38 40 12	ZNTKE SK SNKE WTKN WOTK WUK GUOW	AukNz	N, HEM Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9 95/9,106 9
99 10 11 92 93 94 95 96 97	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-manna penna-manna	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern AlpineWaterfern.LittleHard Alpine water fern. little hard	1 3 1 20 20 5 10	3 6 4 7 6 5	48 24 38 40 12 9	ZNTKE SK SNKE WTKN WOTK WUK GUOW	AukNz Vict Aus	N, HEM Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9 95/9,106 9 93/9.38.97 94/4
19       10       11       12       13       14       15       16       17       18	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-manna penna-manna spicant	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybnd Water Fern AlpineWater fern. IttleHard alpine water fern. IttleHard Ladderfrn,Deer,Hardfm	1 3 1 4 20 20 5 10 5	3 6 4 7 6 5 5	48 24 38 40 12 9 9 28	ZNTKE SK SNKE WTKN WOTK WUK GUOW GUWR ZESWY	AukNz Vict Aus	N. HEM Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ NZ N. Hem. Pac nw	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9 95/9,106 9 93/9,38,97 94/4 95/9
9 10 11 12 13 14 15 16 16 17 18 19	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor minus x wattsii penna-manna penna-manna spicant spicant	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn Crown fam Soft Water frn Hybrid Water Fern AbineWaterfern. LittleHard aloine water fern. little hard Ladderfn,Deer,Hardfm Ladderfn,Deer,Hardfm	1 3 1 20 20 5 10 5 30 1	3 6 6 4 7 6 6 5 5 5 5 5 5	48 24 38 40 12 9 9 28 36	ZNIKE SK WTKN WOTK WUK GUOW GUWB ZESWY ZESO	AukNz Vict Aus	N, HEM Ja, Tai Sibena EAsia Aus, NZ Aus, NZ Aus, NZ NZ NZ NZ N. Hem, Pac nw N. Hem	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9 95/9,106 9 93/9,38,97 94/4 95/9 94/36 92/3
9 0 1 2 3 4 4 5 6 6 7 7 8 9 00	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum	filix-femina iseanum rubripes spinulosum discolor minus x wattsii penna-manna spicant spicant spicant	Victoriae	Queen of Green,Lady fam Spinulosa Lady fm crown farn Soft Water fm Hybrid Water Fern Albine Water fern. IttileHard Ladiorern,Deer,Hardfm Ladderfm,Deer,Hardfm Qiant fladder fern	1 3 1 20 20 5 10 5 30 1 10	3     6     6       4     7     6       5     5     5       4     5     5	48 24 38 40 12 9 9 9 28 36 30	ZNTKE SK SNKE WTKN WOTK WUK GUOW GUWR ZESWY ZESO NTYK	AukNz Vict Aus Wash.	N, HEM Ja, Tar Ja, Tar Ja, Tar Ja, Tar EAsia Aus, NZ Aus, NZ NZ NZ NZ N, Hem N, Calif	95/141 94/ 94/9 92/36 94/45 93/9 95/9 95/9,106 9 93/9,38.97 94/4 95/9 94/36 92/3 94/4
9 10 11 12 13 13 14 15 16 16 17 19 8 99 100 101	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum	flik-femina Iseanum rubripes spinulosum discolor minus minus wattsii penna-manna penna-manna spicant spicant spicant vulcanicum	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Hybrid Water Fern Ladierfrn,Deer,Hardfm Ladierfrn,Deer,Hardfm giant ladder fen wedge water fern	1 3 1 20 20 5 10 5 30 1 10 8	3 6 6 4 7 6 6 5 5 5 5 4 6	48 24 38 40 12 9 9 28 36 30 30 30	ZNTKE SK SNKE WTKN WOTK GUOW GUWR ZESW ZESO NTYK SWQK	AukNz Vict Aus Wash. NatPkNz,Tasm	N. HEM Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ N. Hem, Pac nw N. Hem, Pac nw N. Calif Aus, NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 95/9 95/9,106 9 93/9,38,97 94/4 95/9 94/36 92/3 94/4 93/53
9 10 11 12 13 14 15 16 17 18 19 100 101 102	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum 3	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-manna penna-manna spicant spicant spicant vulcanicum spicant	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Albine Water Fern Albine Water fern. LittleHard Ladberfn,Deer,Hardfm Giant ladder fern giant ladder fern wedge water fern inch. serate deer fern.	1 3 1 4 20 20 5 10 5 30 1 10 8 1	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$	48 24 38 40 12 9 9 28 36 30 30 24	ZNTKE SK WTKN WOTK WUK GUOW GUWR ZESV ZESO ZESV ZESO ZESSY	AukNz Vict Aus Wash. NatPkNz,Tasm	N. HEM           Ja.Tai           Ja.Tai           Sibera           EAsia           NZ           Aus, NZ           NZ           NZ           N. Hem,Pac nw           N. Hem           N.Calif           Aus,NZ           N. Hem	95/141 94/ 94/9 92/36 94/45 93/9 95/9,106 9 95/9,106 9 93/9,38,97 94/4 95/9 94/36 92/3 94/4 93/53 93/36,97
9 0 11 2 3 3 4 4 5 5 6 6 7 7 9 8 9 9 9 100 101 102 103	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum 3 Blechnum 3	filix-femina iseanum rubriges spinulosum discolor minus minus wattsii penna-manna spicant spicant spicant spicant spicant dissectum	Victoriae	Queen of Green,Lady fam Spinulosa Lady fm crown farn Soft Water fm Hybrid Water Fern Hybrid Water Fern Ladderfm,Deer,Hardtm Ladderfm,Deer,Hardtm Janit faidder fern mich. serrate deer fern nich. serrate deer fern. grape fem	1 3 1 4 20 5 10 5 30 1 10 8 1 55	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$	48 24 38 40 12 9 9 28 36 30 30 24 8	ZNTKE SK WTKN WOTK WUK GUOW GUWB ZESW ZESO NTYK SWQK ZESW QLZTN	AukNz Vict Aus Wash. NaiPkNz,Tasm N.Va	N. HEM Ja. Tau Ja. Tau Ja. Tau Ja. Tau EAsia NZ Aus NZ Aus NZ NZ N. Hem N. Calif Aus, NZ N. Hem N. Calif N. Hem N. Am	95/141 94/ 94/9 92/36 94/45 93/9 95/9 95/9,106 9 93/9,38,97 94/4 95/9 94/4 95/9 94/36 92/3 94/4 93/53 93/36,97 93/120
9 10 11 12 13 14 15 16 16 17 18 19 100 101 102 103 104	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum 2 Blechnum 2 Bl	flik-femina iseanum nubripes spinulosum discolor minus wattsii penna-manna penna-manna spicant spicant spicant dissectum Virginanum	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn Crown fam Soft Water frn Hybrid Water Fern AloineWaterfern. LittleHard aloine water fern. Intle hard Ladderfn,Deer, Hardfm Giant Tadder fern wedge water fern nich serrale deer fern. grape fem Pattlesnaka fern	1 3 1 4 20 5 10 5 30 1 10 8 1 55 1	$\begin{array}{r} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \end{array}$	48 24 24 38 40 12 9 9 28 36 30 30 24 8 16	ZNTKE SK SNKE WTKN WOTK GUOW GUWB ZESWY ZESWY ZESWY QLZTN QZVSK	AukNz Vict Aus Wash. NaiPkNz,Tasm N.Va	N. HEM           Ja, Tai           Ja, Tai           Sibena           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           NZ           NA           Aus, NZ           NA           N. Hem, Pac nw           N. Hem           N. Hem           N.Am	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9,106 9 93/9,38,97 94/4 95/9 94/36 92/3 94/4 93/36,97 93/120 95/8
9 0 0 11 22 13 14 15 16 17 10 10 10 10 10 10 10 10 10 10 10 10 10	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum 3 Botrychium 2 \$\$\$ Ceterach	filix-femina iseanum rubripes Spinulosum discolor minus minus x wattsi penna-manna Spicant Spicant Spicant Spicant Spicant dissectum Virginianum officinarum	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Albine water fern. LittleHard Jabine water fern. LittleHard Ladderfn,Deer,Hardfm giant ladder tern wedge water fern nch. serrate deer fern. grape fem Rattlesnaka fern Rattlesnaka fern	1 3 1 20 5 10 5 30 1 10 8 1 55 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ \end{array}$	48 24 38 40 12 9 9 28 36 30 30 24 8 16 6	ZNTKE SK SNKE WTKN WOTK GUOW GUWR ZESWY ZESO NTYK SWQK ZESWY ZESV GUZTN QZYSK ADU	AukNz Vict Aus Wash. NaiPkNz,Tasm N.Va	N. HEM           Ja.Tai           Ja.Tai           Sibera           EAsia           NZ           Aus, NZ           NZ           N.Z           N. Hem, Pac nw           N. Hem           N. Calif           Aus, NZ           N. Hem           N. Jem           N. Hem	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9 95/9 95/9 94/4 93/36.97 94/36 92/3 94/36 92/3 93/36,97 93/120 95/8 94/9.154
9 0 0 11 2 13 14 15 15 16 10 10 10 10 10 10 10 10 10 10 10 10 10	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum 3 Blechnum Blechnum 3 Blechnum 2 Storgehum	flik-femina iseanum nubripes spinulosum discolor minus minus wattsii penna-manna penna-manna spicant spicant spicant vulcanicum spicant Virginianum officinarum officinarum	Victoriae	Gueen of Green,Lady fam Spinulosa Lady fm crown farn Soft Water fm Hybrid Water Fern Hybrid Water Fern Ladderfm,Deer,Hardtm Ladderfm,Deer,Hardtm Janit ladder fern Inch serrate deer fern nch serrate deer fern Rattiesnaka fern Rusty-backfm.ScalySoleen see aspile cetrarch	1 3 1 4 20 5 5 10 5 30 1 10 8 1 10 8 1 55 1 3 2	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5$	48 24 38 40 12 9 9 28 36 30 30 24 8 16 6 6	ZNTKE SK SNKE WTKN WOTK GUOW GUWR GUWR ZESO NTYK SWQK ZESO NTYK ZESO ADU ADU	AukNz Vict Aus Wash. NaiPkNz,Tasm N.Va	N. HEM           Ja. Tau           Ja. Tau           Sibena           EAsia           NZ           Aus, NZ           AusNZ           NZ           NZ           N. Hem           N.Calif           Aus, NZ           N. Hem           N.Calif           Aus, NZ           N. Hem           N.Am           India,Af,Eur           India,Af,Eur	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9 95/9 95/9 93/9.38.97 94/4 95/9 94/36 92/3 94/4 93/53 93/36,97 93/120 95/8 94/9.154
9 0 1 2 3 4 4 5 6 6 7 8 8 9 00 01 02 03 04 05 06 07	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Stechnum Ceterach Ceterach Ceterach 3 Chellanties	filix-femina iseanum rubripes spinulosum discolor minus minus x watsii penna-manna spicant spicant spicant spicant spicant dissectum Vulcanicum spicant dissectum Vulcanicum officinarum officinarum	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern AbineWaterfern. Littlehard aloine water fern. little hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern rich. serrate deer fern. grape fem Rattissnaka fern Rustv-backfin.ScalvSoleen see asolen ceterach. Alabama Lipfrern.	1 3 1 4 20 5 5 30 1 10 5 5 30 1 10 8 1 55 1 3 2 8	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ \end{array}$	48 24 38 40 12 9 9 28 36 30 24 8 16 6 6 18	ZNTKE SK SNKE WTKN WOTK GUOW GUWR GUWR GUWR ZESWY ZESO NTYK SWQK ZESWY QLZTN QZYSK ADU ADU DUAK	AukNz Vict Aus Wash. NaiPkNz,Tasm N.Va	N. HEM           Ja. Tau           Ja. Tau           Sibena           EAsia           NZ           Aus, NZ           AusNZ           NZ           NZ           N. Hem           N.Calif           Aus, NZ           N. Hem           N.Calif           Aus, NZ           N. Hem           N.Am           India,Af,Eur           India,Af,Eur	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9 95/9 95/9 94/4 93/36 92/3 94/4 93/53 93/36,97 93/120 95/8 94/9,154
9 0 1 2 3 4 4 5 6 6 7 8 8 9 00 01 02 03 04 05 06 07	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum 3 Blechnum Blechnum 3 Blechnum 2 Storgehum	flik-femina iseanum nubripes spinulosum discolor minus minus wattsii penna-manna penna-manna spicant spicant spicant vulcanicum spicant Virginianum officinarum officinarum	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern AbineWaterfern. Littlehard aloine water fern. little hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern rich. serrate deer fern. grape fem Rattissnaka fern Rustv-backfin.ScalvSoleen see asolen ceterach. Alabama Lipfrern.	1 3 1 4 20 5 5 30 1 10 5 5 30 1 10 8 1 55 1 3 2 8	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5$	48 24 38 40 12 9 9 28 36 30 30 24 8 16 6 6	ZNTKE SK SNKE WTKN WOTK GUOW GUWR GUWR ZESO NTYK SWQK ZESO NTYK ZESO ADU ADU	AukNz Vict Aus Wash. NaiPkNz,Tasm N.Va	N. HEM           Ja. Tau           Ja. Tau           Sibena           EAsia           NZ           Aus, NZ           AusNZ           NZ           NZ           N. Hem           N.Calif           Aus, NZ           N. Hem           N.Calif           Aus, NZ           N. Hem           N.Am           India,Af,Eur           India,Af,Eur	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9 95/9 95/9 93/9.38.97 94/4 95/9 94/36 92/3 94/4 93/53 93/36,97 93/120 95/8 94/9.154
9 0 1 2 3 4 4 5 6 6 7 7 8 8 9 9 00 01 02 03 04 05 06 07 08	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Stechnum Ceterach Ceterach Ceterach 3 Chellanties	filix-femina iseanum rubripes spinulosum discolor minus minus x watsii penna-manna spicant spicant spicant spicant spicant dissectum Vulcanicum spicant dissectum Vulcanicum officinarum officinarum	Victoriae	Gueen of Green,Lady fam Spinulosa Lady fm crown farn Soft Water fm Hybrid Water Fern Hybrid Water Fern Ladderfm,Deer,Hardtm Ladderfm,Deer,Hardtm Janit ladder fern Inch serrate deer fern nch serrate deer fern Rattiesnaka fern Rusty-backfm.ScalySpieen see aspien cetrarch	1 3 1 4 20 5 5 30 1 10 5 5 30 1 10 8 1 55 1 3 2 8	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ \end{array}$	48 24 38 40 12 9 9 28 36 30 24 8 16 6 6 18	ZNTKE SK SNKE WTKN WOTK GUOW GUWR GUWR GUWR ZESWY ZESO NTYK SWQK ZESWY QLZTN QZYSK ADU ADU DUAK	AukNz Vict Aus Wash. NaiPkNz,Tasm N.Va	N. HEM           Ja. Tai           Ja. Tai           Sibena           EAsia           NZ           Aus, NZ           Aus NZ           NZ           N. Hem, Pac nw           N. Hem           N. Calif           Aus, NZ           N. Hem           N. Adm           N. Hem           N. Hem           N. Hem           N. Hem           S. MZ           Sus, C Am, W           Aus, NZ	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 94/45 95/9 106 9 94/4 94/36 92/3 94/4 94/36 92/3 94/4 94/36 92/3 93/36,97 93/120 95/8 94/9,154 95/9 94/45 92/104
9 0 1 2 3 3 4 4 5 6 6 7 7 8 8 9 0 0 0 0 1 0 2 0 0 0 0 1 0 2 0 0 0 0 0 0	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Sterknum 3 Botrychium Botrychium 2 \$\$\$ Ceterach Ceterach Ceterach Cheilanthes	filix-femina iseanum rubripes Spinulosum discolor minus minus x wattsii penna-manna spicant spicant spicant spicant dissectum Virginanum officinarum alabamensis distans	Victoriae	Cueen of Green,Lady fam Spinulose Lady frn Grown farn Soft Water frn Hybrid Water Fern Albine Water fern. LittleHard Jabine water fern. Initle hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern Grape fem Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Mabama Lipfrern Weolt/Cloakfrn.RsitW. Libfer	1 3 1 4 20 5 10 5 30 1 10 8 1 55 1 3 2 2 8 8 2 2	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ \end{array}$	48 24 38 40 12 9 9 28 36 30 24 8 16 6 6 18 7	ZNTKE SK SNKE WTKN WOTK WUK GUOW GUWB ZESWY ZESWY ZESWY ZESWY QLZTN QLZTN QZVSK ADU ADU DUAK DTZK DUAR	AukNz Vict Aus Wash. NatPKNz,Tasm N.Va Maina	N. HEM           Ja. Tai           Ja. Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           NZ           Aus, NZ           NZ           NA           N. Hem, Pao, nw           N. Hem           N.Aam,           India, Af, Eur           India, Af, Eur           SUS, C. Am, W           Aus, NZ           SW US	95/141 94// 94/9 92/36 94/45 93/9 94/45 93/9 95/9,106 9 93/9,38,97 94/4 93/36,92/3 94/4 93/36,97 93/120 95/8 95/9 94/45 95/9 94/45 92/104 92/104
99 10 11 12 13 14 15 16 17 18 19 10 10 10 10 10 10 10 10 10 10	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Chelanthes Cheilanthes	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-maina penna-maina spicant spicant spicant spicant dissectum Vulcanicum spicant dissectum Officinarum officinarum dificinarum Statans Eatonii Lanosa	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn crown fam Soft Water fren Albine Water Fern Albine Water fern. LittleHard Jabine water fern. LittleHard Ladderfn,Deer,Hardtin Ladderfn,Deer,Hardtin Giant ladder fern och, serate deer fern. grape fem Rattlesnake fern Rustv-backfm.ScalvSpleen see asplen ceterach Alabama Lipfrern WooltyCloaktmBristlvLiefer Eatons Jp fern	1 3 1 4 20 5 5 10 5 30 1 10 8 1 3 2 8 2 8 2 5 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7$	48 24 38 40 12 9 9 28 36 30 30 24 8 16 6 6 18 7 10 12	ZNTKE SK SNKE WTKN WOTK WUK GUOW GUOW ZESWY ZESO NTYK SWQK ZESWY QLZTN QZVSK ADU ADU DUAK DTZK DUAR NSZK	AukNz Vict Aus Vict Aus Vict Aus Nash NaipkNz,Tasm N.Va Maina L L L L L Maina Maina	N. HEM Ja,Tai Ja,Tai Ja,Tai Sibera K. Sibera Aus,NZ Aus,NZ NZ NZ NZ NZ NZ NZ NZ NZ NZ NZ N. Hem N. Galif Aus,NZ N. Hem N. Am N. Hem SuS,C Am,W Aus,NZ SUS,C Am,W Aus,NZ SW US Se N, Am	95/141 94// 94/9 92/36 94/45 93/9 94/45 93/9 95/9,106 9 93/9,38,97 94/4 93/36,92/3 94/4 93/36,97 93/120 95/8 95/9 94/45 95/9 94/45 92/104 92/104
99 10 11 12 13 14 15 16 17 18 19 10 10 10 10 10 10 10 10 10 10	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Storychium 2 <b>\$\$\$</b> Ceterach Ceterach Chelanthes Cheilanthes Cheilanthes	filix-femina iseanum rubripes Spinulosum discolor minus minus x wattsii penna-manna spicant spicant spicant spicant dissectum Virginanum officinarum alabamensis distans Eatonii lanosa tomentosa	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn Grown farn Sott Water frn Hybrid Water Fern Albine water fern. IttileHard. Jabine water fern. IttileHard. Ladderfn,Deer,Hardtim Ladderfn,Deer,Hardtim Giant Iadder fern grape fem Rattisenaka fern Graust-backfurn.ScalvSpieen see asolen ceterach Alabama Lipfrern Woolly, or Hairy lipfern Woolly, or Hairy lipfern	1 3 1 4 20 5 5 10 5 30 1 10 8 1 3 2 8 2 8 2 5 5 5 5 5 5 5 5 5 5 5 5 5	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7$	48 24 24 38 40 12 9 9 28 30 30 24 8 16 6 6 18 7 10 12 12	ZNTKE SK SNKE WTKN WOTK GUOW GUOW GUOW GUOW ZESW ZESW ZESW ZESW ZESW ZESU ADU ADU ADU ADU ADU ADU ADU ADU ADU AD	AukNz Vict Aus Vict Aus Wash. NatPkNz,Tasm NuNa Maina Maina Maina	N. HEM           Ja, Tai           Ja, Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           NZ           N. Hem, Pac nw           N. Hem           N. Calif           Aus, NZ           N. Hem           N. Am           N. Hem           N. Hem           N. Hem           SUS, C Am, W           Aus, NZ           SW US           Se N. Am           S. US, Mex	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9106 95/9106 9 93/9.38.97 94/4 95/9 0 94/36 92/3 94/36 92/3 94/36 92/3 93/120 95/8 93/120 95/8 92/104 95/9 94/45 92/104 92/104 92/104 92/104 93/16.93
9 0 1 2 3 3 4 5 6 6 7 7 8 9 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 16 17 18 19 10 10 10 10 10 10 10 10 10 10	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Chelanthes Cheilanthes Cheilanthes 3 -	flik-femina isearum nubripes spinulosum discolor minus wattsii penna-manna penna-manna spicant spicant spicant spicant dissectum Vulcanicum spicant dissectum Vulcanicum dissectum dificinarum alabamensis distans Eatonii lanosa lomentosa notholaena	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn Grown farn Sott Water frn Hybrid Water Fern Albine water fern. IttileHard. Jabine water fern. IttileHard. Ladderfn,Deer,Hardtim Ladderfn,Deer,Hardtim Giant Iadder fern grape fem Rattisenaka fern Graust-backfurn.ScalvSpieen see asolen ceterach Alabama Lipfrern Woolly, or Hairy lipfern Woolly, or Hairy lipfern	1 3 1 4 20 5 10 5 30 1 10 8 1 3 2 8 2 5 5 1 2 8 2 5 5 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 6 \\ 6 \\ 7 \\ 6 \\ 6 \\ 7 \\ 7$	48 24 24 38 40 12 9 9 28 30 30 24 8 16 6 6 6 6 18 7 10 12 12 12	ZNTKE SK SNKE WUK GUOW GUOW GUOW ZESO NTYK ZESW ZESW ZESW ZESW ZESW ZESW ZESW ZESW	AukNz Vict Aus Vict Aus Vict Aus Nash NaipkNz,Tasm N.Va Maina L L L L L Maina Maina	N. HEM           Ja, Tai           Ja, Tai           Ja, Tai           Sibena           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           NZ           NA           Aus, NZ           N. Hem           N. Aus, MZ           N. Hem           N.Am.           India, Af, Eur           S.USC Am, W           Aus, MZ           SW US           Se N. Am           S. US, Mex           Caucasia	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9 106 9 93/9 38.97 94/4 95/9 94/3 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 94/9,154 95/9 94/45
9 0 1 2 3 3 4 5 6 7 7 8 9 9 00 01 02 03 04 05 06 07 08 09 10 11 12 13	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-manna penna-manna spicant spicant spicant spicant dissectum Virginianum officinarum officinarum officinarum distans Eatonii lanosa lomentosa notholaena intermedia	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Albine water Fern LittleHard abine water fern. Initle hard Ladderfn,Deer,Hardfm giant ladder tern wedge water fern nich, serrate deer, farch grape fem Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Moolly Cloakfrn Stally Lipter Eatons Ig fern Woolly of Hern	1 3 1 4 20 5 10 5 30 1 10 8 1 55 1 30 1 30 1 30 1 30 1 30 1 30 1 1 5 5 30 1 1 5 5 30 1 1 5 5 30 1 1 5 5 30 1 1 5 5 30 1 1 5 5 1 1 5 5 1 1 5 5 1 1 5 5 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 5 1 1 1 5 5 5 1 1 1 5 5 5 1 1 1 5 5 5 1 1 1 5 5 5 5 5 1 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7$	48 24 24 38 40 12 9 9 9 9 28 36 30 30 24 8 16 6 6 6 6 6 6 18 7 10 12 12 12 24 30 30 30 30 24 8 16 6 6 16 16 16 16 16 16 16 16 16 16 16	ZNTKE SK SNKE WTKN WOTK WUK GUOW GUWR ZESO NTYK SWQK ZESO NTYK SWQK ZESW QLZTN QZTN QLZTN QLZTN QLZTN QLZTN DUAK DUAK DUAK DUAK DUAK QUAEK DUAEK QWTZ	AukNz Vict Aus Vict Aus Wash. NatPkNz,Tasm NuNa Maina Maina Maina	N. HEM           Ja.Tai           Ja.Tai           Sibera           EAsia           NZ           Aus, NZ           Aus NZ           NZ           NZ           Aus NZ           NZ           NA           NA           NA           N. Hem           N. Adm.           India.Af.Eur           India.Af.Eur           India.Af.Eur           SUS.C Am.W           Aus.NZ           Sw US           Se N.Am           S.US, Mex           Caucasia           EasiaIndia	95/141 94/ 94/9 92/36 94/45 93/9 95/9 106 9 95/9 106 9 93/9 38.97 94/4 95/9 0 94/4 94/36 92/10 94/36 92/10 95/8 93/36,97 93/120 95/8 95/154 92/104 94/20,145, 94/45 94/45 94/45
9 0 1 2 3 4 5 5 6 6 7 7 8 9 00 01 02 03 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Botrychium 2 \$\$ Ceterach Ceterach Ceterach Cheilanthes Cheilanthes Cheilanthes 3 Cheilanthes 3 Cheilanthes 3	flik-femina iseanum rubripes spinulosum discolor minus watisi penna-manna penna-manna spicant spicant spicant dissectum Virginuanum officinarum officinarum officinarum alabamensis distans Eatonii lanosa noiholaena intermedia japonica	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn Grown farn Sott Water frn Hybrid Water Fern Albine water fern. IttileHard. Jabine water fern. IttileHard. Ladderfn,Deer,Hardtim Ladderfn,Deer,Hardtim Giant Iadder fern grape fem Rattisenaka fern Graust-backfurn.ScalvSpieen see asolen ceterach Alabama Lipfrern Woolly, or Hairy lipfern Woolly, or Hairy lipfern	1 3 1 4 20 5 10 5 30 1 10 8 1 5 5 1 3 2 8 2 5 5 1 3 2 8 2 5 1 1 1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7$	48           24           38           40           12           9           28           30           30           24           30           24           30           20           30           24           36           6           12           10           12           36           48	ZNTKE SK SNKE WOTK WOTK WOTK GUOW GUWB ZESW ZESV ZESV ZESV QLZTN QLZTN QZVSK ADU ADU DUAK DUAR NSZK DUAEK DU GWTZ NSK	AukNz Vict Aus Vict Aus Wash. NatPkNz,Tasm NuNa Maina Maina Maina	N. HEM Ja, Tai Ja, Tai Sibera EAsia NZ Aus, NZ Aus, NZ NZ NZ NZ NZ N. Hem N. Calif Aus, NZ N. Hem N. Calif Aus, NZ N. Hem N. Aus, NZ N. Am N. Am India, Af, Eur India, Af, Eur India, Af, Eur S. US, C Am, W Aus, NZ SW US Se N. Am Caucasia Easialndia	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 95/9 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 94/36,97 94/36,97 94/36,97 95/39,944,5 95/104 95/105,93 95/157,93
9 0 1 2 3 4 5 5 6 6 7 7 8 8 9 000 01 02 03 000 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	filix-femina isearum rubripes spinulosum discolor minus minus x watsi penna-maina penna-maina penna-maina spicant spicant spicant spicant dissectum Vulcanicum spicant dissectum Vulcanicum officinarum dificinarum dificinarum lafabamensis distans Eatonii lanosa tomentosa notholaena infarmedia ilaponica cenulatoserrulata	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn crown fam Soft Water fren Albine Water Fern Albine Water fern. LittleHard Jabine water fern. Ittle hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern nch. serrate deer fern. Grape fem Ratilesnaka fern Rustv-backfrn.ScalvSoleen see asolen ceterach Alabama Lipfrern WooltyCloakfrnBristlyLipfern WooltyCloakfrnBristlyLipfern Woolty (ip fern Bamboo fern	1 3 1 4 20 5 10 5 30 1 10 8 1 5 1 3 2 8 8 2 5 2 11 15 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \end{array}$	48 24 24 38 40 12 9 9 28 30 30 24 30 24 8 16 6 6 6 18 7 10 12 12 12 12 36 30 30 30 24 30 30 30 30 24 30 30 24 30 30 30 30 30 30 30 30 30 30 30 30 30	ZNTKE SK SNKE WOTK WOTK WUK GUOW ZESW ZESW ZESW ZESW GUZ SW ADU ADU ADU DUAK DUAK DUAK DUAK DUAK DU	AukNz Vict Aus Vict Aus Wash. NalPkNz,Tasm Maina Maina Maina Maina Cauc. Cauc.	N. HEM           Ja.Tai           Ja.Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           Aus, NZ           NZ           Aus, NZ           NZ           NAm           N. Hem           N. Hem           N. Hem           N. Hem           N. Hem           N. Hem           SUS.C Am.W           Aus,NZ           SW US           Se N. Am           S. US, Mex           Caucasia           Easia	95/141 94/ 94/5 93/9 94/45 93/9 95/9 106 9 95/9 106 9 93/9 38.97 94/4 95/9 94/36 92/3 94/4 93/53 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 94/31 93/36,97 93/120 95/8 94/9 154 95/9 94/45 92/104 94/9 116 94/9 116 95/105
9 0 1 2 3 4 5 5 6 6 7 7 8 8 9 9 0 0 0 1 0 2 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Strychum 2 \$\$\$ Ceterach Ceterach Cheilanthes	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-manna penna-manna penna-manna spicant spicant spicant spicant dissectum Virginianum officinarum alabamensis distans Eatonii lanosa tomentosa noiholaena intermedia isponica crenulatoserulata aerostichoides	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn Grown fam Soft Water frn Hybrid Water Fern Albine Water fern LittleHard abine water fern. Initle hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern Grape fem Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Mabama Lipfrern Woolky of Haivk lipfern Woolky of Haivk lipfern Woolky of Haivk lipfern Woolky of Haivk lipfern Bamboo fern Parsleytrn,Am.Rock Brake	1 3 1 4 20 5 10 5 30 1 10 8 1 30 1 30 1 10 8 1 30 1 30 1 1 30 1 1 30 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \end{array}$	48 24 24 38 40 12 9 9 28 30 30 24 8 16 6 6 6 6 18 7 10 12 12 12 12 12 36 6 48 33 6 10	ZNTKE SK SK SNKE WTKN WUK GUOW ZESO GUWR ZESW ZESW TZSS SWOK ZESW DU DUAK NTYK SWOK ZESW DU DUAK NSXK DUAK SNK ZUSDA	AuKNz Vict Aus Wash. NatPkNz,Tasm N.Va Maine Cauc. Cauc. RemonaFilis,eagi crk.	N. HEM           Ja.Tai           Ja.Tai           Sibera           EAsia           NZ           Aus, NZ           NZ           NZ           NZ           Aus, NZ           NZ           Aus, NZ           N. Hem, Pac nw           N. Calif           Aus,NZ           N. Hem           N.Am,           India, Af, Eur           India, Af, Eur           SUS, Cam, W           Aus,NZ           Sw US           Se N. Am           S.US, Mex           Caucasia           EasiaIndia           Easia           W US	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9 106 9 95/9 106 9 93/9 38.97 94/4 94/4 93/53 94/36 92/3 94/36 92/3 95/8 94/9 154 95/9 94/45 95/16 94/45 95/12 95/12 95/12
P         P           0         1           1         2           3         4           5         6           7         8           9         00           001         02           003         04           05         06           07         08           09         10           11         12           13         14           15         16           17         16	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	flik-femina iseanum nubripes spinulosum discolor minus watisi penna-manna penna-manna spicant spicant spicant dissectum Virginanum officinarum alabamensis distans Eatonii lanosa tomentosa nonbolaena intermedia laponica crenulatoserrulata acrostichoides	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn crown fam Soft Water fren Albine Water Fern Albine Water fern. LittleHard Jabine water fern. Ittle hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern nch. serrate deer fern. Grape fem Ratilesnaka fern Rustv-backfrn.ScalvSoleen see asolen ceterach Alabama Lipfrern WooltyCloakfrnBristlyLipfern WooltyCloakfrnBristlyLipfern Woolty (ip fern Bamboo fern	1 3 1 4 20 5 10 5 30 1 10 8 1 30 1 55 10 5 30 1 10 8 1 30 1 10 8 1 30 2 8 2 5 5 2 2 11 10 5 5 5 5 2 2 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \end{array}$	48 24 24 38 40 12 9 9 28 30 30 24 8 16 6 6 6 6 6 6 6 18 7 10 12 12 12 12 36 6 8 8 10 12 8 8 10 12 8 8 10 12 12 12 12 12 12 12 12 12 12 12 12 12	ZNTKE SK SK WTKN WUK GUOW WOTK GUOW WOTK GUOW ZESW QUW ZESW SWOK ADU ADU ADU ADU DUAK ADU ADU DUAK MDI ZUSW SN K SN K SN K NSK NSK NSK NSK NUAK	AukNz Vict Aus Vict Aus Vict Aus Mash NatPkNz,Tasm NVa Maina Cauc. RamonaFilis,eagl crk. Norway	N. HEM           Ja, Tai           Ja, Tai           Ja, Tai           Sibena           EAsia           NZ           Aus, NZ           Aus, NZ           NAm, NEm, Pac nw           N. Hem           N.Am, India, AI, Eur           India, AI, Eur           S. US, C. Am, W           Aus, NZ           SW US           Se N. Am           S. US, Mex           Caucasia           Easialndia           E.asia           W US           Easia           W US           EurWasiaAt	95/141 94/ 94/9 52/36 94/45 93/9 94/45 93/9 95/9,106 9 95/9,106 9 95/9,106 9 94/36 92/3 94/4 95/9 94/36 92/3 94/4 93/120 95/8 94/9,154 95/9 94/45 95/104 94/20,145 95/157 95/12 94/19,124
9 0 1 2 3 4 5 5 6 6 7 7 8 8 9 9 0 0 0 1 0 2 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Blechnum Strychum 2 \$\$\$ Ceterach Ceterach Cheilanthes	filix-femina iseanum rubripes spinulosum discolor minus minus x watsii penna-maina penna-maina penna-maina spicant spicant spicant spicant dissectum Vulcanicum spicant dissectum Virginianum officinarum dificinarum dificinarum dificinarum dificinarum dificinarum iatabamensis distans Eatonii lanosa tomentosa intermedia intermedia acostichoides Crispa heterophylia	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn Grown fam Soft Water frn Hybrid Water Fern Albine Water fern LittleHard abine water fern. Initle hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern Grape fem Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Mabama Lipfrern Woolky of Haivk lipfern Woolky of Haivk lipfern Woolky of Haivk lipfern Woolky of Haivk lipfern Bamboo fern Parsleytrn,Am.Rock Brake	1 3 1 4 20 5 10 5 30 1 10 8 1 30 1 55 10 5 30 1 10 8 1 30 1 10 8 1 30 2 8 2 5 5 2 2 11 10 5 5 5 5 2 2 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \end{array}$	48 24 24 38 40 12 9 9 28 30 30 24 8 16 6 6 6 6 6 6 6 18 7 10 12 12 12 12 36 6 8 8 10 12 8 8 10 12 8 8 10 12 12 12 12 12 12 12 12 12 12 12 12 12	ZNTKE SK SK SNKE WTKN WUK GUOW ZESO GUWR ZESW ZESW TZSS SWOK ZESW DU DUAK NTYK SWOK ZESW DU DUAK NSXK DUAK SNK ZUSDA	AuKNz Vict Aus Wash. NatPkNz,Tasm N.Va Maine Cauc. Cauc. RemonaFilis,eagi crk.	N. HEM           Ja, Tai           Ja, Tai           Ja, Tai           Sibena           EAsia           NZ           Aus, NZ           Aus, NZ           NAm, NEm, Pac nw           N. Hem           N.Am, India, AI, Eur           India, AI, Eur           S. US, C. Am, W           Aus, NZ           SW US           Se N. Am           S. US, Mex           Caucasia           Easialndia           E.asia           W US           Easia           W US           EurWasiaAt	95/141 94/ 94/9 92/36 94/45 93/9 94/45 93/9 95/9 106 9 95/9 106 9 93/9 38.97 94/4 94/3 92/9 94/3 692/ 94/3 692/ 94/3 692/ 94/3 692/ 95/18 95/106 94/9 154 95/19 94/45 95/16 95/16 95/17 95/12
9         1           0         1           1         2           3         4           5         6           7         3           4         5           6         7           8         9           000         01           02         03           04         05           06         07           08         09           10         11           12         13           14         15           16         17           18	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	flik-femina iseanum nubripes spinulosum discolor minus watisi penna-manna penna-manna spicant spicant spicant dissectum Virginanum officinarum alabamensis distans Eatonii lanosa tomentosa nonbolaena intermedia laponica crenulatoserrulata acrostichoides	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn Grown fam Soft Water frn Hybrid Water Fern Albine Water fern LittleHard abine water fern. Initle hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern Grape fem Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Mabama Lipfrern Woolky of Haivk lipfern Woolky of Haivk lipfern Woolky of Haivk lipfern Woolky of Haivk lipfern Bamboo fern Parsleytrn,Am.Rock Brake	1 3 1 4 20 5 10 5 30 1 10 8 1 30 1 55 10 5 30 1 10 8 1 30 1 10 8 1 30 2 8 2 5 5 2 2 11 10 5 5 5 5 2 2 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7$	48 24 24 38 40 12 9 9 28 30 30 24 8 16 6 6 6 6 6 6 6 18 7 10 12 12 12 12 36 6 8 8 10 12 8 8 10 12 8 8 10 12 12 12 12 12 12 12 12 12 12 12 12 12	ZNTKE SK SK WTKN WUK GUOW WOTK GUOW WOTK GUOW ZESW QUW ZESW SWOK ADU ADU ADU ADU DUAK ADU ADU DUAK MDI ZUSW SN K SN K SN K NSK NSK NSK NSK NUAK	AukNz Vict Aus Vict Aus Vict Aus Mash NatPkNz,Tasm NVa Maina Cauc. RamonaFilis,eagl crk. Norway	N. HEM           Ja.Tai           Ja.Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           Aus, NZ           NZ           Aus, NZ           NZ           NAm           N. Hem           N. Hem           N. Hem           N. Hem           N. Hem           N. Hem           N.Am           NAm           SUSC Am.W           Aus,NZ           SW US           Se N. Am           S. US, Mex           Caucasia           Easia           W US           Easia           W US           EurWasiaAt           AusNZ	95/141 94/ 94/5 93/9 94/45 93/9 95/9 106 9 95/9 106 9 95/9 106 9 93/9 38.97 94/4 93/53 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 94/36 93/36,97 93/120 95/9 94/36 93/36,97 93/120 95/9 94/36 192/104 92/104 92/104 92/104 92/104 92/105 95/10 95/12 95/12 95/12 95/12
9         1           0         1           1         2           3         4           5         6           7         3           4         5           6         7           8         9           000         01           02         03           04         05           06         07           08         09           10         11           12         13           14         15           16         17           18         19	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	flik-femina iseanum nubripes spinulosum discolor minus minus watsii penna-manna penna-manna penna-manna spicant spicant spicant vulcanicum spicant dissectum Virginianum officinarum officinarum officinarum distans Eatonii lanosa tomentosa notholaena intarmedia laponica crenulatoserrulata erostichordes Crspa heterophylla	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn Grown fam Soft Water frn Hybrid Water Fern Albine Water fern LittleHard abine water fern. Initle hard Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern Grape fem Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Rattlesnaka fern Mabama Lipfrern Woolky of Haivy lipfern woolly lip fern Bamboo fern Parsleytrn,Am.Rock Brake	1 3 1 4 20 20 5 10 5 30 1 10 8 1 5 30 1 10 8 1 5 30 1 10 8 1 2 5 2 10 10 5 30 1 10 5 5 2 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7$	48 24 24 38 40 12 9 9 9 9 28 36 30 24 8 16 6 6 6 6 18 7 10 12 12 12 12 12 36 6 48 36 10 8 31 10 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	ZNITKE SK SK SNKE WUTKN WUTK GUOW GUOW ZESW GUOW ZESW ZESO NTYK SWOK ADU DUAK DUAK DUAK SNK SNK SNK SNK SNK GUZTN NSK SNK GUZK COMPE SNK SNK GUZK COMPE SNK SNK SNK SNK GUZK SNK GUZK SNK SNK GUZK SNK SNK GUZK SNK SNK GUZK SNK SNK SNK SNK SNK SNK SNK SNK SNK SN	AukNz Vict Aus Wash. NatPkNz,Tasm N.V.a Maina Cauc. Cauc. PamonaFilis,eagl.crk. Norway V/crAusi	N. HEM           Ja, Tai           Ja, Tai           Ja, Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           NZ           NZ           NZ           NZ           NZ           NZ           NAm,           N. Hem           N.Am,           India, AI, Eur           India, AI, Eur           SUS, Cam,W           SwUS           Se N. Am           S. US, Mex           Caucasia           EasiaIndia           EasiaIndia           Easia           W US           EurWasiaAt           AusNZ	95/141 94/ 94/9 52/36 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/36 92/3 94/4 95/9 94/36 92/3 94/4 93/36 92/3 93/32 93/3 93/3
9 0 1 2 3 4 5 6 6 7 7 8 9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	flik-femina iseanum nubripes spinulosum discolor minus wattsii penna-manna penna-manna spicant spicant spicant spicant dissectum Vulcanicum spicant distans Eatonii lanosa lomentosa notholaena intermedia isponia crenulatoserrulata acrostichoides Crispa heterophylla diryopteris	Victoriae	Queen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern AlbingWaterfern. Littlehard Ladderfn,Deer,Hardfm Ladderfn,Deer,Hardfm Itadderfran Beer, Hardfm Grape fern Antiesnaka fern Rustv-backfrn.Scalv.Soleen see asolen ceterach. Alabama Lipfrern Woolt/CloakfrnBristlv.infer Eatons fip fern Woolty or Hairy lipfern Wooly, or Hairy lipfern Bamboo fern Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake	1 3 1 4 20 5 10 5 30 1 10 8 1 3 2 8 2 5 1 1 3 2 8 2 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 5 1 1 1 1 5 1 1 1 8 8 1 1 1 1 5 1 1 1 1 8 8 1 1 1 1 1 5 1 1 1 1 1 5 1 1 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7 \\ 6 \\ 7 \\ 7$	48 24 24 38 40 12 9 9 28 36 30 30 24 8 16 6 6 6 6 6 6 6 18 7 10 12 12 12 36 48 30 10 12 9 9 9 12 4 9 9 9 9 12 4 9 9 9 12 4 9 9 9 12 12 12 12 12 12 12 12 12 12 12 12 12	ZNITKE SK SK SNKE SNKE SURE SURE SURE SNKE ZESON ADU ZESON ADU ADU ADU ADU ADU ADU ADU ADU ADU ADU	AukNz Vict Aus Vict Aus Wash. NaIPKNz,Tasm N.Va Maina Cauc.	N. HEM Ja, Tai Ja, Tai Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ N. Hem, Pac nw N. Hem N. Calif Aus, NZ N. Hem N. Am N. Hem N. Am N. Hem N. Am N. Hem N. Am N. Hem S. US, Cam, W Aus, NZ SW US Se N. Am S. US, Mex Caucasia Easia Easia Easia W US Easia Easia EurWasiaA1 AusNZ NHem Kermado rs, NZ	95/141 94/ 94/5 93/9 94/45 93/9 95/9 106 9 95/9 106 9 95/9 106 9 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 93/120 95/8 93/120 95/9 94/36 95/9 94/36 92/104 94/20,1145, 95/157 93/120 95/157 95/157 95/157 95/157 95/157 92/104 94/9 19/97 95/157 94/9 19/97 94/9 19/97 92/9 93/87 92/9
9 0 1 2 3 4 5 6 6 7 7 8 9 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-manna spicant spicant spicant spicant dissectum Vulcanicum spicant dissectum Virginianum officinarum afabamensis distans Eatonii lanosa tomentosa intermedia iaponica crenulatoserrulata acrosticchoides Cnspa heterophylia diryopteris Kermadacensis Caryotideum	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn crown farn Soft Waler frn Hybrid Water Fern Albine water Fern Ladderfn,Deer,Hardtm Ladderfn,Deer,Hardtm Giant ladder fern mod. serrate deer fern. grape fem Rattiesnaka fern Rustv-backfm.ScalvSpleen see asolen ceterach Alabama Lipfrern Woolly/CloakfmBristlvLipfern Woolly CloakfmBristlvLipfern Woolly (Ipfern Bamboo fern Parsleyfm,AsiaticRock Brake Parsleyfm,AsiaticRock Brake Parsleyfm,AsiaticRock Brake	1 3 1 4 20 5 10 5 30 1 10 8 1 3 2 8 25 5 2 2 11 15 50 25 10 10 10 10 10 10 10 10 10 10	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 7$	48 24 38 40 12 9 9 28 36 30 24 8 16 6 6 6 6 6 6 12 12 12 36 8 30 24 10 12 0 9 24 12 0 9 24 12 24 12 24 24 12 24 28 36 24 28 36 24 28 28 36 24 28 28 36 24 28 36 24 28 36 28 36 24 28 36 28 36 24 28 36 28 36 24 28 36 28 36 24 28 36 30 24 28 36 30 24 28 36 30 24 24 36 30 24 36 30 24 36 30 24 36 30 24 36 30 24 36 30 24 36 30 24 36 30 24 36 30 24 36 30 24 36 30 24 30 24 30 30 30 30 24 30 30 30 24 30 30 30 30 24 30 30 30 30 30 30 24 30 30 30 24 30 30 30 24 30 30 30 30 24 30 30 24 30 30 30 30 24 30 30 30 30 30 30 30 30 30 30 30 30 30	ZNITKE, SK SNKE SNKE SNKE GUWTKN WUK GUWTKN GUWTKN SWOK ZESW ADU ZESW ADU ADU DUAK DUZYSK DUAR DUAK DUAR DUAR DUAR SNK ZUHDA SNK ZUHDA ZNTKE SWIKK ZUHDA ZNTKE ZNTKE ZNTKE ZNTKE	AukNz Vict Aus Vict Aus Vict Aus NatPkNz,Tasm N.Va Maina Maina Cauc. BamonaFilis,eagi crk Norway VictAusi	N. HEM           Ja,Tai           Ja,Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           Aus, NZ           NZ           Aus, NZ           N. Hem,Pac nw           N. Hem           N. Jern           N. Ads,NZ           N. Hem           N. Jern           NAm.           India,Af,Eur           India,Af,Eur           SUS,C Am,W           Aus,NZ           SW US           Se N. Am           S. US, Mex           Caucasia           Easia           EurWasiaAt           AusNZ           NHem           Kermadc is,NZ	95/141 94/ 94/5 93/9 94/45 93/9 95/9 106 9 95/9 106 9 95/9 106 9 93/9 38.97 94/4 93/9 38.97 94/4 93/9 94/36 92/9 94/36 92/9 94/36 92/9 94/36 92/9 94/36 92/9 94/36 92/9 94/20 145, 95/9 94/45 95/106 95/106 95/106 95/106 95/106 95/106 95/106 95/106 95/106 95/106 95/12,45 95/106 95/12,45 95/106 95/12,45 95/12,45 95/106 95/12,45 95/106 95/12,45 95/106 95/12,45 95/106 95/12,45 95/106 95/12,45 95/106 95/12,45 95/106 95/12,45 95/12,45 95/12,45 95/29 94/9,12,45 95/29
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9 0 1 2 3 3 4 5 5 6 7 7 8 9 0 0 0 1 0 2 0 3 0 4 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	filix-femina iseanum nubripes spinulosum discolor minus wattsii penna-manna penna-manna spicant spicant spicant vulcanicum spicant dissectum Virginianum officinarum officinarum officinarum alabamensis distans Eatonii lanosa Intermedia liaponica earostichoides Crispa heterophylla diryopteris Kermadacensis Canyoldeum laleatum falcatum	Vetoriae	Queen of Green,Lady fam Spinulosa Lady frn crown fam Soft Water frn Hybrod Water Fern AlbineWaterfern. Littlefand Ladderfn,Deer,Hardtm Ladderfn,Deer,Hardtm Giant Tadder fern nch. serrale deer fern. grape fem Rattissnaka fern Rustv-backfn,Scat/Spieen see asolne oetrach Alabama Lipfrern Wool/Viloakfn/Brist/Vilofer Eatons fip fern Wooly, or Hairy lipfern Wooly, or Hairy lipfern Wooly fern Parsleyfrn,Am.Rock Brake Parsleyfrn,AsiaticRock Brk LapaneseHolly fern	$\begin{array}{c}1\\1\\3\\3\\1\\4\\20\\5\\10\\5\\10\\1\\5\\1\\3\\2\\8\\10\\1\\1\\5\\5\\10\\1\\1\\1\\5\\50\\10\\1\\1\\1\\1\\5\\50\\10\\1\\1\\40\\17\\17\\40\\17\\17\\17\\17\\17\\17\\17\\17\\17\\17\\17\\17\\17\\$	3 6 6 4 7 6 6 5 5 5 4 6 5 4 4 5 5 6 7 4 5 6 6 7 7 6 2 6 7 6 6 6 6	48 24 24 38 40 12 9 9 9 28 36 30 24 8 30 24 8 16 6 6 6 6 6 18 7 10 12 12 12 36 48 36 10 12 24 24 22 24 22 22 24 22 24 22 24 24 24	ZNITKE SK SK SNKE WUK WUK UWTKN WUK GLOW ZESW ZESW ZESW ZESW ZESW ZESW ZESW ZES	AukNz Vict Aus Vict Aus Vict Aus Vict Aus Vict Aus NatPkNz,Tasm NatPkNz,Tasm NVa Maina Cauc Cauc Cauc RamonaFils,eagl crk Norway VictAusI Azores	N. HEM           Ja. Tai           Ja. Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           Aus, NZ           NZ           Aus, NZ           NZ           Name           NA           N. Hem           N. Aas, NZ           N. Hem           N.Am           NAM.           SUS, CAm, W           Aus, NZ           SW US           Se N. Am           S. US, Mex           Caucasia           EasiaIndia           Easia           W US           EurWasiaAt           AusNZ           NHem           NHem           Kermado is, NZ           India, Easia, Hawai           E&Sasia	95/141 94/ 94/5 93/9 94/45 93/9 94/45 93/9 95/9 106 9 95/9 106 9 95/9 106 9 93/9 38.9 94/36 92/3 94/36 92/3 94/36 92/3 94/36 92/3 93/36,97 93/120 95/9 94/36 92/3 93/36,97 93/120 95/9 94/36 95/19 94/36 95/104 95/105 95/12 94/9 192/104 95/157 95/12 94/9 192/9 95/12 45 95/12 94/9 192/9 95/13 92/9 93/87 92/1245 95/157 195/157
9 0 1 2 3 3 4 5 5 6 7 7 8 9 0 0 0 1 0 2 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Stechnum Sterken Chelanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Cheilanthes Chuytogramma Comogramme Comogramme Comopreirs Sterken Cyrtomum Cyrtomum Cyrtomum Cyrtomum	flik-femina iseanum nubripes spinulosum discolor minus wattsii penna-manna penna-manna spicant spicant spicant dissectum Virginanum officinarum alabamensis distans Eatonii lanosa tomentosa noholaena intermedia laponica crenulatoserrulata acrostichoides Crispa heterophylla Kermadacensis Caryotideum taleatum taleatum taleatum	Vetoriae  Cristatum  Cristatum  Cristatum  Arge torm, 3' Redwood giant  Rickard's serrata  obliquum  officianarum  marantae  Crested  Crested Rochfordianum	Cueen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Albine Water fern Jabine Water fern. Jittle hard Ladderfrn,Deer,Hardfm Ladderfrn,Deer,Hardfm Geer, Hardfm Gaber, Hardfm Gaber, Hardfm Rustv-backfrn.ScalvSoleen see asolen ceterach Alabama Lipfrern WoollyCloakfrnBristlyLinder Eatons fiptern WoollyCloakfrnBristlyLinder Eatons fiptern Woolly Lipfern Woolly Lipfern Bamboo fern Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Bork Brake Dwarf holly fern Dwarf holly fern	1 3 1 4 20 5 10 5 30 1 10 8 1 55 10 1 3 2 8 25 5 2 1 1 3 2 5 10 10 8 1 1 3 2 5 10 10 10 10 10 10 10 10 10 10	3 6 6 4 7 6 6 5 5 5 4 6 5 4 4 5 5 6 7 4 5 6 6 7 7 6 2 6 7 6 6 6 6 6 5	48 24 38 40 12 9 9 28 36 30 30 24 36 6 6 6 6 18 7 10 12 12 36 48 36 6 6 18 7 10 12 12 28 24 24 24 22 20 22 22	ZNITKE SK SK SNKE SNKE SUNKE WUKN WUKN UUKN GUWR ZESWN CZUSK ZESWN CZZSK ZESWN CZZSK ZESWN CZZSK ZESWN DUJAK ADU DUJAK ADU DUJAK SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA SNK ZUBOJA ZNTKE ZN	AukNz Vict Aus Vict Aus Vict Aus Vict Aus Ause NatPkNz,Tasm NVa Maina Cauc Cauc RamonaFilis,eagl crk Norway VictAusI Azores L VictAusI L L L L L L L L L L L L L L L L L L L	N. HEM Ja, Tai Ja, Tai Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ N. Hem, Pac nw N. Hem N. Calif Aus, NZ N. Hem N. Aus, NZ N. Hem N. Am N. Hem N. Am N. Hem N. Am N. Hem S. US, CAM, W Aus, NZ SW US Se N. Am S. US, Mex Caucasia Easia	95/14 94/ 94/9 92/36 94/45 93/9 95/9 105/9 95/9 105 9 95/9 105 9 94/36 93/9 94/36 93/9 94/36 93/3 94/36 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 93/36,97 94/9,154 95/10 95/12 94/9,154 95/12 94/9,12,45 95/12 94/9,12,45 95/9 93/87 92/ 93/87 92/ 95/153 95/163 95/163 95/163 95/163 95/153
9         9           0         1           2         3           3         4           3         4           4         5           6         7           9         00           01         02           03         04           05         06           07         08           09         10           11         12           13         14           15         16           17         18           19         20           221         22           122         23           124         125	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Blechn	filix-femina iseanum nubripes spinulosum discolor minus wattsii penna-manna penna-manna spicant spicant spicant vulcanicum spicant dissectum Virginianum officinarum officinarum officinarum alabamensis distans Eatonii lanosa Intermedia liaponica earostichoides Crispa heterophylla diryopteris Kermadacensis Canyoldeum laleatum falcatum	Victoriae	Cueen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Albine Water fern Jabine Water fern. Jittle hard Ladderfrn,Deer,Hardfm Ladderfrn,Deer,Hardfm Geer, Hardfm Gaber, Hardfm Gaber, Hardfm Rustv-backfrn.ScalvSoleen see asolen ceterach Alabama Lipfrern WoollyCloakfrnBristlyLinder Eatons fiptern WoollyCloakfrnBristlyLinder Eatons fiptern Woolly Lipfern Woolly Lipfern Bamboo fern Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Bork Brake Dwarf holly fern Dwarf holly fern	1 3 1 4 20 5 10 5 30 1 10 8 1 55 10 1 3 2 8 25 5 2 1 1 3 2 5 10 10 8 1 1 3 2 5 10 10 10 10 10 10 10 10 10 10	3 6 6 4 7 6 6 5 5 5 4 6 5 4 4 5 5 6 7 4 5 6 6 7 7 6 2 6 7 6 6 6 6 6 5	48 24 38 40 12 9 9 28 36 30 30 24 36 6 6 6 6 18 7 10 12 12 36 48 36 6 6 18 7 10 12 12 28 24 24 24 22 20 22 22	ZNITKE SK SK SNKE WUK WUK UWTKN WUK GLOW ZESW ZESW ZESW ZESW ZESW ZESW ZESW ZES	AukNz Vict Aus Vict Aus Vict Aus Vict Aus Ause NatPkNz,Tasm NVa Maina Cauc Cauc RamonaFilis,eagl crk Norway VictAusI Azores L VictAusI L L L L L L L L L L L L L L L L L L L	N. HEM Ja, Tai Ja, Tai Sibena EAsia NZ Aus, NZ Aus, NZ NZ NZ NZ N. Hem, Pac nw N. Hem N. Calif Aus, NZ N. Hem N. Am N. Hem N. Am N. Hem N. Am N. Hem N. Am N. Am S. US, Mex Caucasia E asia M. US E curWasiaAt AusNZ NHem Kermadc is, NZ India, Easia, Hawai E & Sasia E & Sasia	95/141 94/ 94/9 52/36 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 95/9 94/45 95/9 94/4 95/9 94/36 92/3 94/4 92/104 94/20,145, 95/157 93/12 94/9 18 93 95/157 93/12 94/106 95/157 93/12 94/1165 95/157 92/9 93/957 92/9 93/957 92/9 93/957 92/9 93/957 92/9 93/957 92/9 93/957 92/9
9         9           0         1           2         3           3         3           4         5           6         77           8         9           000         01           02         03           04         05           05         06           07         08           09         10           111         12           113         14           15         16           17         18           19         20           21         23           124         125           124         125           124         125	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Stromer Conogramme Conogramme Conogramme Conogramme Conogramme Conogramma Cryptogramma Cryptogramma Cryptogramma Crystomum Cystomum Cystomum Cystomum	filix-femina iseanum rubripes spinulosum discolor minus minus x wattsii penna-manna spicant spicant spicant spicant dissectum vulcanicum spicant dissectum vulcanicum dificinarum officinarum dificinarum dificinarum dificinarum dificinarum alabamensis distans Eatonii lanosa linomolaena intermedia ilaponica crenulatoserulata acrostichoides Cnspa heterophyla diryopteris Kermadacensis caryotideum lalactum lalactum lalactum lalactum	Vetoriae  Cristatum  Cristatum  Cristatum  Arge torm, 3' Redwood giant  Rickard's serrata  obliquum  officianarum  marantae  Crested  Crested Rochfordianum	Cueen of Green,Lady fam Spinulosa Lady frn crown fam Soft Water frn Albine Water Fern Albine Water fern. LittleHard Jabine water fern. Itilte hard Ladderfn,Deer,Hardfm Giant ladder fern Giant ladder fern Green, Hardfm Rustv-backfrn.ScalvSoleen sea asolen ceterach Alabama Lipfrern WooltyClaakfrnBristlvLiefer Eatons tip fern WooltyClaakfrnBristlvLiefer Bamboo fern Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Bock Brake Parsleyfrn,Am.Bock Brake Parsleyfrn,Am.Bock Brake Parsleyfrn,Am.Bock Brake Parsleyfrn,Am.Bock Brake Parsleyfrn,Am.Bock Brake Dwarf holly fern Japanese Holly Fern	1 3 1 4 20 5 10 5 10 5 1 1 5 1 30 1 5 5 1 1 30 1 5 5 1 2 8 2 2 1 1 1 5 5 5 1 2 8 2 2 1 1 1 1 5 5 5 1 1 1 1 5 5 5 5 1 1 1 1 5 5 5 5 1 1 1 1 5 5 5 5 1 1 1 1 5 5 5 5 1 1 1 1 5 5 5 5 1 1 1 5 5 5 5 5 1 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 7 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$	48 24 38 40 12 9 9 9 28 30 30 24 8 16 6 6 10 12 12 24 8 16 6 6 10 12 12 24 24 30 24 12 24 24 20 24 12 24 12 24 12 24 12 24 12 24 12 24 12 24 12 24 12 28 30 24 12 28 30 24 12 28 30 24 30 24 30 24 30 24 30 24 30 24 30 24 30 24 30 30 24 30 24 30 30 24 30 30 30 30 30 30 30 30 30 30 30 30 30	ZNITKE SK SNKE SNKE SNKE SNKE GUCW WTKN WUK ZESW NUK ZESW NTKK ZESW NTKK ZESW NTK ZESW DUAK DUAK DUAK DUAK DUAK DUAK DUAK SNK ZUFDO DUA SNK ZUFDO SNK ZUFDO SNK ZUFDO SNK ZUFDO SNK ZUFDO ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE	AukNz Vict Aus Vict Aus Wash. NaPkNz,Tasm N.Va Maina Cauc. Cauc. RamonaFilis,eagl crk Norway VictAusi Azores Ukakayama,Jp.	N. HEM           Ja,Tai           Ja,Tai           Sibera           EAsia           NZ           Aus, NZ           N. Hem           N.Galif           Aus,NZ           NAm.           India,Af,Eur           India,Af,Eur           SUS,C Am,W           SUS,C Am,W           SUS,C S, Mex           S. US, Mex           Caucasia           Easia           W US           Easia           W US           Easia           W US           Easia           WUS           Easia           Ju/WasiaAt           AusNZ           India,Easia,Hawai           E&Sasia <td< td=""><td>95/141 94/ 94/5 93/9 94/45 93/9 94/45 93/9 95/9 106 9 95/9 106 9 93/9 38/9 94/36 92/3 94/36 92/3</td></td<>	95/141 94/ 94/5 93/9 94/45 93/9 94/45 93/9 95/9 106 9 95/9 106 9 93/9 38/9 94/36 92/3 94/36 92/3
9         9           0         0           11         1           12         03           04         05           06         07           07         08           09         00           01         01           02         03           03         04           05         06           07         08           09         00           01         01           02         03           03         04           05         06           07         08           09         00           110         02           111         112           112         113           114         115           112         123           122         123           122         124           125         126           127         127	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Cytomum Cytomum Cytomum	flik-femina iseanum nubripes spinulosum discolor minus watsi penna-manna penna-manna spicant spicant spicant vulcanicum spicant dissectum Virginianum officinarum officinarum officinarum distans Eatonii lanosa lomentosa notholaena intermedia intermedia istansa corsultatoserrulata crenulatoserrulata crenulatoserrulata crenulatoserrulata caryotideum talcatum talcatum talcatum talcatum fortunei fortunei	Vetoriae  Cristatum  Cristatum  Cristatum  Arge torm, 3' Redwood giant  Rickard's serrata  obliquum  officianarum  marantae  Crested  Crested Rochfordianum	Cueen of Green,Lady fam Spinulosa Lady frn crown farn Soft Water frn Hybrid Water Fern Albine Water fern. LittleHard Jabine water fern. Intite hard Ladderfn,Deer,Hardfm Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern nch, serrate deer fern. grape fem Ratilsenaka fern Rustv-backfrn.ScalvSoleen see asolen ceterach Alabama Lipfrern WooltyCloakfrnBristlvLiefer Eatons lip tern WooltyCloakfrnBristlvLiefer Eatons lip tern WooltyCloakfrnBristlvLiefer Bamboo fern Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Bork Brake Dwarf holly fern Japanese Holly Fern Larce-leatedHolty fern Bio bladder fern Barboo fern	$\begin{array}{c} 1\\ 3\\ 1\\ 4\\ 20\\ 20\\ 5\\ 10\\ 5\\ 30\\ 1\\ 1\\ 55\\ 1\\ 3\\ 2\\ 8\\ 2\\ 5\\ 1\\ 3\\ 2\\ 8\\ 2\\ 5\\ 1\\ 1\\ 1\\ 1\\ 50\\ 25\\ 10\\ 11\\ 50\\ 15\\ 10\\ 50\\ 15\\ 15\\ 225\\ 10\\ 1\\ 1\\ 50\\ 15\\ 12\\ 22\\ 5\\ 10\\ 12\\ 22\\ 5\\ 10\\ 12\\ 22\\ 5\\ 10\\ 12\\ 12\\ 22\\ 5\\ 10\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12$	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$	48 24 38 40 9 9 28 36 30 24 28 36 30 24 8 16 6 6 10 12 12 12 12 36 48 10 12 12 24 110 110 110 110 110 110 110 110 110 11	ZNITKE SK SK SNKE SNKE SNKE SNKE SUCK SNKE ZESO NTYK ZESO NTYK ZESO NTYK ZESO NTYK ZESO NTYK ZESO NTYK DUAK DUAK DUAK DUAK SNK ZUEDO UUAR NSK ZUEDO UUAR SNK ZUEDO UUAR SNK ZUEDO UUAR SNK ZUEDO UUAR SNK ZUEDO ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE	AukNz Vict Aus Vict Aus Wash. Nula Nula Maina Maina Cauc. Cauc. RamonaFils,eagl crk. Norway VictAusl Azores Wakayama,Jp. Wakayama,Jp.	N. HEM           Ja, Tai           Ja, Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           Aus, NZ           NZ           NZ           NA           NZ           NZ           NZ           NZ           NZ           NA           N. Hem           N.Am           NAM.           SUS, Cam,W           Aus,NZ           SW US           Se N. Am           Sulls, Mex           Caucesia           Easialndia           Easial           W US           EurWasiaAt           AusNZ           NHem           Kermadc is, NZ           India,Easia,Hawai           E&Sasia           LaSasia           Jp,ChKor           JpChKor           LaSasia	95/141 94/ 94/9 52/36 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 92/3 94/4 94/36 92/3 94/4 95/9 93/36 92/3 93/32 95/9 94/36 92/3 93/32 95/9 94/36 92/3 93/32 95/9 94/36 92/3 93/32 95/9 94/31 83 94/912 82 95/106 95/157 95/12 94/152 95/157 95/9 3/45 95/157
9         9           00         11           12         12           13         14           15         16           100         101           102         103           104         105           105         100           101         102           103         104           105         106           106         107           108         109           101         111           112         113           114         115           1121         122           123         124           125         126           122         123           124         125           126         127           128         127	Athyrium 3 Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Stechnum Stechalanthes Cheilanthes Chonogramme Comopteris Storytogramma Cytonum Cytomum Cytomum Cytomum Cytomum Cytomum	flik-femina iseanum nubripes spinulosum discolor minus wattsii penna-manna spicant spicant spicant spicant spicant dissectum Vulcanicum spicant distaretum dificinarum alabamensis distans Eatonii lanosa lomentosa notholaena intermedia lagonica crenulatoserrulata acrostichoides Crispa heterophylla discatum flalcatum flalcatum flalcatum flalcatum flalcatum	Vetoriae  Cristatum  Cristatum  Cristatum  Arge torm, 3' Redwood giant  Rickard's serrata  obliquum  officianarum  marantae  Crested  Crested Rochfordianum	Cueen of Green,Lady fam Spinulosa Lady frn crown fam Soft Water frn Hybrid Water Fern Albine Water fern. LittleHard Jabine water fern. Intite hard Ladderfn,Deer,Hardfm Ladderfn,Deer,Hardfm Giant ladder tern wedge water fern nch, serrate deer fern. grape fem Rustv-backfrn.ScalvSoleen sea asolen ceterach Alabama Lipfrern WooltyCloakfrnBristlvLipfern Eatons lip tern WooltyCloakfrnBristlvLipfern WooltyCloakfrnBristlvLipfern WooltyCloakfrnBristlvLipfern WooltyCloakfrnBristlvLipfern Bamboo tern Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,Am.Rock Brake Parsleyfrn,AmaeseHolty fern Japanese Holty Fern Japanese Holty Fern Larce-leatedHolty fern Bio bladder fern Biothern Biothern Larce-leatedHolty fern Biothern Barboot fern	$\begin{array}{c} 1\\ 3\\ 1\\ 4\\ 20\\ 20\\ 5\\ 10\\ 5\\ 30\\ 1\\ 1\\ 55\\ 1\\ 3\\ 2\\ 8\\ 2\\ 5\\ 1\\ 3\\ 2\\ 8\\ 2\\ 5\\ 1\\ 1\\ 1\\ 1\\ 50\\ 25\\ 10\\ 11\\ 50\\ 15\\ 10\\ 50\\ 15\\ 15\\ 225\\ 10\\ 1\\ 1\\ 50\\ 15\\ 12\\ 22\\ 5\\ 10\\ 12\\ 22\\ 5\\ 10\\ 12\\ 22\\ 5\\ 10\\ 12\\ 12\\ 22\\ 5\\ 10\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12$	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$	48 24 38 40 9 9 28 36 30 24 28 36 30 24 8 16 6 6 10 12 12 12 12 36 48 10 12 12 24 110 110 110 110 110 110 110 110 110 11	ZNITKE SK SK SNKE SNKE SNKE SNKE SUCK SNKE ZESO NTYK ZESO NTYK ZESO NTYK ZESO NTYK ZESO NTYK ZESO NTYK DUAK DUAK DUAK DUAK SNK ZUEDO UUAR NSK ZUEDO UUAR SNK ZUEDO UUAR SNK ZUEDO UUAR SNK ZUEDO UUAR SNK ZUEDO ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE ZNTKE	AukNz Vict Aus Vict Aus Wash. Nula Nula Maina Maina Cauc. Cauc. RamonaFils,eagl crk. Norway VictAusl Azores Wakayama,Jp. Wakayama,Jp.	N. HEM           Ja, Tai           Ja, Tai           Sibena           EAsia           NZ           Aus, NZ           Aus, NZ           NAm, NCalif           Nus, MZ           SW NAM           SUSC Am,W           Aus,NZ           SW US           Se N. Am           S. US, Mex           Caucasia           EasiaIndia           Easia           W US           EurWasiaA1           AusNZ           NHem           E&Sasia           E&Sasia           E&Sasia           E&Sasia           E&Sasia           E&Chkor           JpChKor           JpChKor           LurNAm	95/141 94/ 94/5 93/9 94/45 93/9 94/45 93/9 95/9 106 9: 95/9 106 9: 95/9 106 9: 94/36 92/3 94/36 92/3 94/36 92/3 94/4 95/9 94/36 92/3 93/120 95/8 93/120 95/8 93/120 95/8 93/120 95/8 92/104 94/20 145, 95/157 93/154 95/157 93/154 95/157 93/154 95/157 93/154 95/157 93/154 95/157 93/154 95/157 93/154 95/157 93/154 95/155 93/154 95/155 93/154 95/155 93/154 95/155 93/154 95/155 93/154 95/155 93/154 93/36 92/ 93/36 92/ 93/36 92/ 94/91 24 25 93/36 92/
9         9           0         1           2         3           34         5           6         7           9         00           01         02           03         04           05         06           07         03           04         05           06         07           08         09           101         12           13         14           15         16           17         18           19         20           223         124           125         126           127         128           129         129	Athyrium 3 Athyrium 3 Athyrium 3 Blechnum Cytomum Cytomum Cytomum	flik-femina iseanum nubripes spinulosum discolor minus watsi penna-manna penna-manna spicant spicant spicant spicant vulcanicum Spicant dissectum Virginianum officinarum officinarum officinarum distans Eatonii lanosa lomentosa notholaena intermedia intermedia isponica crenulatoserrulata crenulatoserrulata crenulatoserrulata Eatophila beterophila discostichoides Cnspa heterophila Kermadacensis Eatyolideum Italcatum Italcatum Italcatum	Vetoriae  Cristatum  Cristatum  Cristatum  Arge torm, 3' Redwood giant  Rickard's serrata  obliquum  officianarum  marantae  Crested  Crested Rochfordianum	Gueen of Green,Lady fam Spinulosa Lady frn crown fam Soft Water frn Soft Water fern John Water Fern Abine Waterfern. Littlehard Ladderfn,Deer, Hardtm Ladderfn,Deer, Hardtm Giant Iadder fern grape fem Rusty-backfn.ScaNSpleen see asolne, oeterach Alabama Lipfrern Woolk/CloakfrnBrstilvLipfer Eatons lg ren Wooky, or Hairy lipfern Wooky, or Hairy lipfern Wooky, or Hairy lipfern Bamboo fern Parsleyfrn,AsialicRock Brake Parsleyfrn,AsialicRock Brake Dwarf holly fern Japanese Holly fern Japanese Holly Fern Large-jealedHolky fern Bio	$\begin{array}{c} 1\\ 3\\ 1\\ 4\\ 20\\ 20\\ 5\\ 10\\ 5\\ 30\\ 1\\ 1\\ 55\\ 1\\ 3\\ 2\\ 8\\ 1\\ 1\\ 55\\ 2\\ 5\\ 10\\ 1\\ 1\\ 50\\ 25\\ 10\\ 10\\ 50\\ 15\\ 15\\ 50\\ 25\\ 50\\ 55\\ 50\\ 55\\ 50\\ 55\\ 50\\ 55\\ 50\\ 55\\ 50\\ 55\\ 55$	$\begin{array}{c} 3 \\ 6 \\ 6 \\ 4 \\ 7 \\ 6 \\ 6 \\ 5 \\ 5 \\ 5 \\ 5 \\ 4 \\ 6 \\ 5 \\ 4 \\ 4 \\ 5 \\ 5 \\ 6 \\ 7 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 6 \\ 2 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 7 \\ 6 \\ 6 \\ 6 \\ 6$	48 24 24 38 40 12 9 9 9 28 36 30 24 8 30 24 8 16 6 6 6 6 6 18 10 12 12 12 12 12 12 12 12 12 12 12 12 12	ZHIKE SK SK SNKE WUK WUK UWIK GUWR ZESW ZESW ZESW ZESW ZESW ZESW ZESW ZESW	AukNz Vict Aus Vict Aus Vict Aus Vict Aus Vict Aus Vict Aus Nather Automatic	N. HEM           Ja, Tai           Ja, Tai           Sibera           EAsia           NZ           Aus, NZ           Aus, NZ           NZ           Aus, NZ           NZ           NZ           NA           NZ           NZ           NZ           NZ           NZ           NA           N. Hem           N.Am           NAM.           SUS, Cam,W           Aus,NZ           SW US           Se N. Am           Sulls, Mex           Caucesia           Easialndia           Easial           W US           EurWasiaAt           AusNZ           NHem           Kermadc is, NZ           India,Easia,Hawai           E&Sasia           LaSasia           Jp,ChKor           JpChKor           LaSasia	95/141 94/ 94/9 52/36 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 93/9 94/45 92/3 94/4 94/36 92/3 94/4 95/9 93/36 92/3 93/32 95/9 94/36 92/3 93/32 95/9 94/36 92/3 93/32 95/9 94/36 92/3 93/32 95/9 94/31 83 94/912 82 95/106 95/157 95/12 94/152 95/157 95/9 3/45 95/157

HFF		SPECIES	CVR	COM. NAME	Ж	Z	SZE	GRO	COLL.SITE	ORIG	DONOR
	Cystopteris	sudetica					10			Eur,Easia	94/12,45 93/
	Cystopteris 1	montana			8			ANTR		Cosmo	95/12
	Cystopteris 3	fragilis	anthriscifolia	BrittleBladderFern.Fragile	5			ZNTEK		Cosmo,	94/45
35	Dennstaedtia	hirsuta			10	6	16	KENT	Wakayama, Jp	Easia	94/82
36	Dicksonia \$\$\$ 1	fibrosa		RoughTreefrn,WhekiPonga	10	7	120	BEONU	Nt Prk NZ, Aukind	NZ	95/9 94/25
37	Diphasiastrum34	Complanatum		Northern running pina	2	2	8			N NAm	94/9
	Diplazium	pycnocarpon		NarrowLeafedGladefn.Glad			32	WS		E. N.A.	94/8 93/9
	Doodia	Aspera _		Prickly rasp fern			15	UNG	SE Aus.	Aus,NZ,Norf is	95/9,157 94/
	Doodia	madia		Common Rasp Fern	20	7	10	TWNZB			
	Doodia		0			7				AusNZ Nrfolk Island	
		media	Caims	Common Rasp Fern	20		10	TWNZB	E AUS	AusNZ Nrfolk Island	
	Dryopteris	abbreviata			8	5					94/45
43	Dryopteris	aemula		Hay-scanted Woodfern	2	6	20	SNKEH		Eur	
	Dryopteris	affinis			8	4	48	SNTKE		Eur SWasia	95/12
145	Dryopteris	attinis	affinis	GoldenScaledMalefrn.scaly	12	4	48	SNTKE		Eur SWasia	95/9
146	Dryopteris	affinis	borren	scalv male fem, golden	20	4	48	SNK		Eur SWasia	94/135
147	Dryopteris	affinis	borran, Pseudodisjunta		20	4	1	SNTKE	Switz		94/45
	Dryopteris	affinis	borreri robusta	scaly male fern, golden	20	4	48	SNK		Eur SWasia	94/135
	Dryopteris	affinis	cambrensis	crisped golden scaled male		4	36	SNVTK		Eur SWasia	94/25 92/45
150	Dryopteris	affinis	Coriacea	male farn	1	4	24	SNTK		Iran	94/45
					-						
	Dryopteris	affinis	Crispa	crisped golden scaled male		4	48	SNTKE		Eur SWasia	94/20
	Dryopteris	affinis	Crispa gracilis	crisped dwarf golden scale		4	16	SNTKE		Eur SWasia	93/36
	Dryopteris	affinis	Cnspa stablen	NarrwCrspdGoldenScaled		4		SNTKE		Eur SWasia, Eng	94/25 93/36
	Dryopteris	attinis	Cristata "The King"	TheKingofMalefrns.scalv	3	4	48	SNTKE	Victona,Aus	Eur SWasia, Aus	94/45.97
	Dryopteris	affinis	disjuncta	scaly male fem, golden	6	4	48	SNTKE		Eur SWasia	94/45
	Dryopteris	affinis	Persica	scaly male fern, golden	30	4	48	SNTKE		Eur SWasia	92/26,45
	Dryopteris	affinis	Pinden	scalv male fem. golden	4	4	48	SNTK		Eur SWasia	94/150
58		affinis	Polydactyla Dadds		3	4	48	SNTKE		Eur SWasia	93/125
59		affinis		dadds long fingrd golden		4	48	SNTKE		Eur SWasia	92/9
			psaudodisjuncta	scalv male fern, golden	5				CIA/IT7		
	Dryopteris	affinis	punctata	scaly male fem, golden	4	4	48	SNTKE	5W112	Eur SWasia	94/45 92/9.
	Dryopteris	affinis	robusta	scalv male fem, golden	8	4	48	SNTKE		Eur SWasia	93/100 92/9
	Dryopteris	affinis	stilluppensis	scaly male fem, golden	4		48	SNTKE		Eur SWasia	
63	Dryopteris	affinis	The King	scaly male fern, golden	6			SNTKE		Eur SWasia	94/141
64	Dryoptaris	atrata		shaggy shiald farn	30	6	18	NTK		N Hem	94/9.156
65	Dryopteris	austnaca	spinulosa	Spinulose Wood Farn	2		48	OSNK		N. Hem	92/9
66	Dryopteris	Bamsii	1		2	5	1	1	Me		
67	Dryopteris	bissetiana		BeadedWoodfern	20	5	24	SZKEN		10	93/34,45,97
	Dryopieris			DeadedWoodlein				K		Jp	
	Dryopteris	blanfordii			20	13	36	<u> </u>		N. Hem	95/12 94/45
	Dryopteris	Borren	cristata	Crested Scaly Male fern	2	4	48	L		Eur,SWAsia	94/9
70		Borran	pinden	Scaly male fern	2	4	48	I		Eur,SWAsia	94/9
71	Dryopteris	cambrensis	1		7	6		1	CumbriaEng	Eng	92/24,26
172	Dryopteris	carthusiana		SpinuloseWoodfrn.Toothed	10	2	30	TZWKE		Europe, N Am	94/9
173	Dryopteris	caucasica			20	5	34			Caucasian mt	95/12 94/45
174	Dryopteris	championii		Champion'sWoodfrn	25	5	24	OKNT		Easia	94/10 93/7
175	Dryopteris	chinensis			3	5	20	EKNT		Easia	94/9 93/38
	Dryopteris	clintoniana		Clintons woodfern	25	3	40	WSKE		ENA	95/141 92/2
					90	15	36	TVKE	lanan Eiji mthlan In	Ko,Ch,Jp	
177		crassirhizoma		Thick-stemmedWoodfrn					JapanFiji,mtNan.Jp		94/45 93/9.3
	Dryopteris	crassirhizoma	nakai	Thick-stemmedWoodfrn	10	5	36	TVK	Japan	Japan	
179	Dryopteris	cristata		CrestedShiektfern.NarrowS	60	3	36		N.H.,Mich	N. HEM	95/141.108
	Dryopteris	cycadina		ShaqqyShieldfrn.Blackwoo	40	5	30	NUKE		N Hem	94/45,97 93
181	Dryopteris	cystolepidota			15	7	10	INSK		JapCh	94/38
82	Dryoptaris	dickinsii			15	7	24	1		Ch,Jp	95/12 93/9,4
83	Dryopteris	dilatata		BroadBucklerfrn.BroadWo	25	4	40	WTOS	Walas,Germ	NHem,GreenInd	95/12
184		dilatata	Crispa Whiteside	crisped broad buckler fern		4	36	WTOSK		NHem	94/25 92/11
85		dilatata	Grandiceps	BroadBucklerfrn.BroadWo		4	36	WTOS		NHem	
86		dilatata	Jimmy Dyca	JimmyDycesUprightBroad		4	20	WTOS		GBrit.	94/36 93/36
87		dilatata	Lepodota cristata			4	18			N Hem	94/25 92/97
				LacyCrestedBroadBuckler	13			WTOS			
88	Dryopteris	dilatata	Recurvata	RecurvedBroadBucklerfrn.		4	36	WTOS		N Hem	93/25,113
89	Dryopteris	arythrosora	1	Autumn farn	35	5	16	TNKO		ChJpKr	95/1
90	Dryoptaris	arythrosora	Prolifica	Prolific autumn farn	5	5	16	TNKO		ChJpKr	94/156 93/9
91	Dryopteris	erythrosora	white sori form	autumn fern	5	5	16	TNKO		ChJpKr	92/25
92	Dryopteris	expansa		ArchingWoodfernSpreadin	30	3	30	RTNE	NWWisc	NW N.Am	94/9.36.20.
93	Dryopteris	filix-mas		Male Fern	90	3	60	ZSNVE		N Hem	94/9.27.135
94		filix-mas	Bamasii	barnes narrw Male Frn	10	3		ZSNVE		NHem	95/141
95		filix-mas	Cristata	Male Fern	60	3		ZSNVE	1	NHem	93/120,131
96	Dryopteris	filix-mas	cristata martindale	Male fern	7	4	48			N.Hem	95/141 ,25
				Male Fern		3		ZSNOK			
97	Dryoptaris	filix-mas	CristataFilmy type		20		60	ZSNV		NHem	93
98	Dryoptaris	filix-mas	Grandiceps	grandicapital crested Male	15	3	36	ZSNVE		N Ham	94/9,25
199	Dryopteris	filix-mas	lineans	Slender Male frn	17	4	136	ZSNOK	L	N.Ham	95/141 94/1
200	Dryopteris	Filix-mas	Linearis Plumosa		1		60	ZSNOK		N.Hem	94/12,141
	Dryopteris	filix-mas	Lineans polydactyla	Siender crested Male Fern	30					N Hem	94/148.45.9
	Dryopteris	Filix-mas	Martindala	male fern				ZSNOK		N.Hem	94/141
	Dryoptaris	filix-mas	polydactyla	Male farn	5	4	48	ZSNOK		N.Hem	94/141
	Dryopteris	filix-mas	small erect type	Male Fern	114	12	49	ZSNUK	Germ	N Hem	94/12 93/12
					144	10	140	TRANE	i dom		
	Dryopteris	filix-mas	sublineans	Male fern	111	4	48	ZSNOK		N.Hem	94/141
	Dryoptaris	filix-mas	undulata robusta	Male Fern				ZSNVE		NHem	95/108 94/9
	Dryopteris	fragrans		fragrant woodfern	130	2	110	RSN	Mong, Irkukst	NA,AsiaGreenid	94/45
	Dryopteris	goldiana		Goldie'stem, GiantWoodfrn	15	3	48	TNVKE		NAm	94/141.36.
	Dryopteris	goldiana hyb. ?	x D. clintonia ?	Goldia's Fern	7	3	48	SN	СТ	CT	94/39
	Dryopteris	intermedia		EvergreenWoodfrn.Glandu	a10	3	34	ZSNOF		E N America,	94/9.12
	Dryopteris	juxtaposita		1		7		1		India	94/45 93/9
12	Dryopteris	lacera						NTKE	Wakayama, Jp.	EasiaIndia	95/12 94/8
	Dryopteris	Lepidota		Sunset frn				ZNEK	L. and Junia, op.	NindiaCh Eur	94/45
			Ly Libraria						INC NO		
	Dryopteris	ludoviciana	x Hybrid	SouthnWoodfm.SouthnSh	ej0	6	46	ASEW	INE NC.	SEUS	94/2,9
14	Dryopteris	marginalis		LeatherWoodfm, Marginal	50			ESNOK	Pa,Me	NE N. Am	95/108
214		nigropaleacea			4	7		1			93/9
214 215 216	Dryopteris										
214 215 216 217	Dryopteris	nipponensis			3			NSKE		Chjp	94/148
214 215 216 217				MountainMalefm.DwarfMa					ElbrusCaucusus	ChJp Eur	
14 15 16 17	Dryopteris	nipponensis		MountainMale(m.DwarfMa ScalyWoodfrn	30	4	20		ElbrusCaucusus		94/148 95/12 94/18.97 93

vopteris yop	pseudo-mas pseudo-mas pseudo-mas psevonopteroides ramosa sieboldii sieboldii sieboldii sieboldii submontana tokvoensis uniformis varia va	Cristata Cvenata Incisum amercana setosa complexa critica small asian Lux-lunae polydacytla Cristata Jackson Plumosa	see d. affins see d. affins Siebold'sWoodfrn Siebold'sWoodfrn Toothed wood fern FloridBucklertrn.Lumestone TokyoWoodfrn see d. bissetiana see d. bissetiana see d. bissetiana see d. bissetiana see d. bissetiana Malich's wood fern hybrid robust male frn hybrid robust male frn hybrid robust male frn Male fern Male fern Dixie Woodfrn Giant Horsetail marsh horsetail	10 50 1 5 6 15 20 50 1 50 1 10 50 1 10 20 60 3 4 12 43 15 60	4 6 6 6 6 6 6 6 6 6 6 5 5 5 6 6 6 5 5 5 3 4 4 5 4 4 5 4	24 24 20 24 20 20 30 30 30 24 24 24 24 20 30 30 30 30 30 30 24 40 36 36 36 36 36	EZSRN ZNKOE ZSNK ZSNK SNKB WTKE ETNK ETVNK SWKE	Jp PriuBausko Bulg Wisc Rum Germ NwarkNJ	SikkimJap Easia Easia Easia Easia Easia Eur, N. Af Jp,Kor Easia Sasia,Philipin Eur Pantropic NA Europe Europe Europe EUS	94/148 93/38 94/97 93/98 94/97 93/9 94/156 92/111 94/10 94/10 94/10 94/2 92/11 94/104 95/141 94/153 93/9, 10, 12, 43 94/45 92/111 95/12 94/45 93/24 94/45 95/12 92/9 94/25 94/12 94/29, 81, 56
yopteris yop	pycnopteroides ramosa sieboldii sieboldii spinulosa sublacera sublacera sublacera submontana tokyoensis uniformis varia varia varia varia varia varia varia varia valiarii wallichiana x booti X complexa X tavelii amurensis celsa remota Expansa ? filix-mas filix-mas filix-mas filix-mas telmateia palustre Ramosissimum billardien diryopteris diryopteris divopteris	Cvenata Incisum amercana setosa setosa complexa critica small asian Lux-lunae polydacytia Cristata Jackson	Siebold'sWoodfrn Siebold'sWoodfrn Toothed wood fern RioidBucklerfrn, Limestone TotkyoWoodfrn aee d. bissetiana see d. bissetiana see d. bissetiana walich's wood fern Boots Woodfern hybrid robust male frn hybrid robust male frn hybrid robust male frn Log Fern Male Fern Dixie Woodfrn Giant Horsetal	50 1 4 5 6 15 20 15 20 10 50 1 10 20 10 50 1 10 20 10 10 20 4 10 20 10 20 10 10 20 10 20 10 20 10 20 20 10 20 20 10 20 20 20 20 20 20 20 20 20 2	$ \begin{array}{c} 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 6\\ 7\\ 6\\ 5\\ 5\\ 6\\ 6\\ 5\\ 5\\ 3\\ 4\\ 4\\ 5\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 5\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\$	24 24 20 24 20 20 30 30 30 24 24 40 30 36 36 36 24 40 36	KENTO ZSENK ZSNKE ZSNK ZSNK ZN EANK EZSRN ZNKOE ZSNK ZSNK ZSNK SNKB WTKE ETNK ETNK ETNK SWKE ZTWO KNTE	Huttnroof Camb Eng Jp PriuBausko Bulg Wisc Rum Germ NwarkNJ	SikkimJap Easia Easia Easia Easia Easia Eur, N. Af Jp,Kor Easia Sasia,Philipin Eur Pantropic NA Europe Europe Europe EUS	94/97 93/9 94/155 92/111 92/111 94/10 94/10 94/20 94/29 94/29 92/111 95/12 94/15 92/111 95/12 94/45 92/111 95/12 94/45 93/24
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yopteris yop	seboldii seboldii seboldii spinulosa sublacera submontana tokycensis uniformis vana varia vitari walichiana x bootii X complexa X co	Incisum amercana setosa setosa complexa crítica small asian Lux-lunae polydacytla Cristata Jackson	Siebold'sWoodfrn Toothed wood fern RiaidBucklertrn.Limestone TokyeWoodfrn See d. bissetiana See d. bissetiana See d. bissetiana Wallich's wood fern Boots Woodfern hybrid robust male frn hybrid robust male frn hybrid robust male frn Log Fern Log Fern Male fern Male Fern Dixie Woodfrn Giant Horsetal	4 5 6 15 20 50 1 10 50 1 10 20 60 3 4 12 43 15 60 25 8 10 3 5	6 6 6 4 7 6 5 5 6 6 6 5 5 3 4 4 5 4 4 5 4	20 24 20 20 30 30 24 24 40 30 36 36 36 24 40 36	ZSNKE ZSNK ZN EANK EZSRN ZSNK ZSNK ZSNK SNKB WTKE ETNK ETVNK SWKE ZTWO KNTE	Huttnroof Camb Eng Jp PriuBausko Bulg Wisc Rum Germ NwarkNJ	Easia Easia Easia Easia Eur, N. Af Jp,Kor Easia Sasia,Philipin Sasia,Philipin Eur Pantropic NA Europe Europe Europe Europe Europe	94/156 92/11' 92/111 93/10 93/3,9,97 94/24,25 92/4 94/104 95/141 94/152 93/9,10,12,43 94/45 92/111 95/12 94/45 94/45 95/12 92/9 94/45 95/12 92/9 94/12 94/2,9,38,156
vopteris vop	seboldii sieboldii sieboldii sublacera sublacera sublacera subacera submontana tokyoensis uniformis varia varia varia varia varia vitlarii wallichiana x bootii X complexa X com	Incisum amercana setosa setosa complexa crítica small asian Lux-lunae polydacytla Cristata Jackson	Siebold'sWoodfrn Toothed wood fern RiaidBucklertrn.Limestone TokyeWoodfrn See d. bissetiana See d. bissetiana See d. bissetiana Wallich's wood fern Boots Woodfern hybrid robust male frn hybrid robust male frn hybrid robust male frn Log Fern Log Fern Male fern Male Fern Dixie Woodfrn Giant Horsetal	5 6 15 20 10 50 1 10 20 60 3 4 12 43 15 60 25 8 10 3 5	6 6 4 7 6 5 5 6 6 6 5 5 5 6 6 6 5 5 3 4 4 5 4 4 5 4 4	20 24 20 20 30 30 24 24 40 30 36 36 36 24 40 36	ZSNKE ZSNK ZN EANK EZSRN ZSNK ZSNK ZSNK SNKB WTKE ETNK ETVNK SWKE ZTWO KNTE	Huttnroof Camb Eng Jp PriuBausko Bulg Wisc Rum Germ NwarkNJ	Easia Easia Easia NA,Jp Leur, N. Af Jp,Kor Easia Sasia,Philipin Sasia,Philipin Eur Pantropic NA Europe Europe Europe EUS	92/111 94/10 93/3,9,97 94/24,25 92/4 94/104 95/141,94/151 92/9,10,12,43 94/45 92/111 95/12 94/45 95/12 94/45 95/12 92/9 94/45 95/12 92/9 94/12 94/12
vopteris vop	seboldii spinulosa sublacera submontana tokyoensis uniformis varia	Incisum amercana setosa setosa complexa crítica small asian Lux-lunae polydacytla Cristata Jackson	Toothed wood fern RiaidBucklerfm.Limestone TokyoWoodfrn see d. bissetiana see d. bissetiana Wallich's wood fern Boots Woodfern hybrid robust male frn hybrid robust male frn Amur woodfern Log Fern Male fern Male Fern Dixie Woodfrn Giant Horsetal	6 15 20 10 50 1 10 20 60 3 4 12 43 15 60 25 8 10 3 5	6 4 7 6 5 5 6 6 6 5 5 5 6 6 6 5 5 3 4 4 5 4 4 5 4 4 5 4	24 20 20 30 30 24 24 40 30 36 36 36 24 40 36	ZSNK ZN EANK EZSRN ZNKOE ZSNK ZSNK ZSNK ZSNK SNKB WTKE ETNK ETVK SWKE ZTWO KNTE	Huttnroof Camb Eng Jp PriuBausko Bulg Wisc Rum Germ NwarkNJ	Easia N.A.Jp Eur, N. Af Jp,Kor Easia Sasia,Philipin Sasia,Philipin Eur Pantropic NA Europe Europe Europe EUS	94/10 93/3,9,97 94/24,25 92/4 94/104 95/141 94/15; 93/9,10,12,43 94/45 92/111 95/12 94/45 95/12 94/45 95/12 92/9 94/45 95/12 92/9 94/12 94/12
yopteris yop	spinulosa sublacera subrontana tokycensis uniformis varia varia vilarii wallichiana x bootii X complexa X complexa X complexa X complexa X complexa X complexa X complexa x tavelii amurensis celsa remota Expansa ? filix-mas	amercana setosa complexa critica small asian Lux-lunae polydacytia Cristata Jackson	Toothed wood fern RiaidBucklerfm.Limestone TokyoWoodfrn see d. bissetiana see d. bissetiana Wallich's wood fern Boots Woodfern hybrid robust male frn hybrid robust male frn Amur woodfern Log Fern Male fern Male Fern Dixie Woodfrn Giant Horsetal	15 20 10 50 1 10 20 60 3 4 12 43 15 60 25 8 10 3 5	4 7 6 5 5 6 6 6 6 5 5 3 4 4 5 4 4 4 5 4	24 20 30 30 24 24 40 30 36 36 24 40 36	ZN EANK EZSRN ZNKOE ZSNK ZSNK SNKB WTKE ETNK ETNK ETVK SWKE ZTWO KNTE	Huttnroof Camb Eng Jp PriuBausko Bulg Wisc Rum Germ NwarkNJ	N A,Jp Eur, N. Af Jp,Kor Easia Sasia,Philipin Sasia,Philipin Eur Pantropic NA Europe Europe Europe Europe E US	93/3.9.97 94/24.25 92/4 94/104 95/141 94/15 93/9.10.12.43 94/45 92/111 95/12 94/45 94/45 93/24 94/45 95/12 92/9 94/12 94/12 94/2 9.3 8.156
yopteris yop	sublacera submontana tokycensis uniformis varia vilarii wallichiana x booti X complexa X complexa X complexa X complexa X complexa x tavelii amurensis celsa remota Expansa ? filix-mas filix-mas filix-mas filix-mas namegatae x australis teimateia palustre Ramosissimum billardien diyopteris diyopteris robertianum	setosa complexa crítica small asian Lux-lunae polydacytla Cristata Jackson	RiaidBucklertrn.Lumestonel TokyoWoodtrn see d. bissetiana see d. bissetiana see d. bissetiana Wallich's wood tern Boots Woodtern hybrid robust male frn hybrid robust male frn hybrid robust male frn Log Fern Log Fern Male fern Male fern Dixie Woodtrn Giant Horsetaä	20 W5 10 50 1 10 20 60 3 4 12 43 15 60 25 8 10 3 5 5	7 6 5 6 6 6 5 5 3 4 4 5 4 4 5 4 4 4	20 20 30 24 24 24 40 36 36 24 40 36 24 40 36 24 40 36 24 40 36 36 24 40 36 36 36 36 36 36 36 36 36 36	EANK EZSRN ZNKOE ZSNK ZSNK SNKB WTKE ETNK ETNK SWKE ZTWO KNTE	Huttnroof Camb Eng Jp PriuBausko Bulg Wisc Rum Germ NwarkNJ	Eur, N. Af Jp,Kor Easia Sasia, Philipin Sasia, Philipin Eur Pantropic NA Europe Europe Europe E US	94/24,25 92/4 94/104 95/141 94/15; 93/9,10,12,43 94/45 92/111 95/12 94/45 94/45 93/97 93/24 94/45 92/97 95/12 92/9 94/12 94/12 9,38,156
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vopteris vop	tokyoensis uniformis varia varia varia valiarii wallichiana x booti X complexa X complexa X complexa X complexa X complexa X complexa x tavelii amurensis celsa remota Expansa ? filix-mas	complexa critica small asian Lux-lunae polydacytla Cristata Jackson	TokyoWoodfrn see d. bissetiana see d. bissetiana Wallich's wood fern Boots Woodfern hybrid robust male frn hybrid robust male frn Log Fern Male fern Male Fern Dixie Woodfrn Giant Horsetal	10 50 1 20 60 3 4 12 43 15 60 25 8 10 3 5	5 6 6 5 5 3 4 4 5 4 4 5 4 4 5 4	30 30 24 24 30 36 36 36 24 40 36	EZSRN ZNKOE ZSNK ZSNK SNKB WTKE ETNK ETVNK SWKE ZTWO KNTE	Jp PriuBausko Bulg Wisc Bum Germ NwarkNJ	Jp,Kor Easia Sasia,Philipin Sasia,Philipin Eur Pantropic NA Europe Europe Jp E US	95/141 94/15: 93/9.10.12.43 94/45 92/111 95/12 94/45 94/45 93/97 93/24 94/45 95/12 92/9 95/12 92/9 94/12 94/2.9.38.156
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yopteris 3 yopteris 3 yopteris 3 julisetum \$ 1 julisetum \$ 1 ammitis \$\$\$ ymnocarpium ymnocarpium ymnocarpium 1 ypolepis juliopteris 3	filix-mas Namegatae x australis telmateia palustre Ramosissimum billardien diryopteris dryopteris dryopteris millefolia	Cristata Jackson	Male Fern Dixie Woodfrn Giant Horsetail	3		160	ZSNOK			95/159
yopteris 3 yopteris 3 juisetum \$ juisetum \$ 1 juisetum \$ 1 ammäis \$\$\$ ymnocarpium ymnocarpium ymnocarpium 1 ypolepis juiptoptens 3	Namegatae x australis telmateia palustre Ramosissimum billardien dryopteris dryopteris robertianum millefolia		Dixie Woodfrn Giant Horsetail	5		48	ZESNO			94/45
yopteris 3 juisetum \$ juisetum \$ 1 juisetum \$ 1 ammitis \$\$\$ ymnocarpium ymnocarpium ymnocarpium 1 ypolepis iptoptens 3	x australis teimateia palustre Ramosissimum billardien dryopteris dryopteris robertianum millefolia	Plumosa	Giant Horsetail		17	1			Jap	94/45
uisetum \$ uisetum \$ 1 uisetum \$ 1 ammits \$\$ vmnocarpium vmnocarpium vmnocarpium 1 vpoleps ptoptens 3	telmateia palustre Ramosissimum billardien dryopteris dryopteris robertianum millefolia	Plumosa	Giant Horsetail	1.77	5	60				
uisetum \$ 1 ammits \$\$\$ mnocarpium mnocarpium mocarpium ptoptens 3	palustre Ramosissimum billardien dryopteris dryopteris robertianum millefolia	Plumosa		10		70	0000		NW N.A.	95/9,162
uisetum \$ 1 ammitis \$\$\$ vmnocarpium vmnocarpium vmnocarpium 1 vpolepis ptoptens 3	Ramosissimum billardien dryopteris dryopteris robertianum millefolia	Plumosa	matan norsetall	7						95/9
ammitis \$\$\$ mnocarpium mnocarpium mnocarpium 1 polepis ptoptens 3	billardien dryopteris dryopteris robertianum millefolia	Plumosa			2		WUK			95/9
/mnocarpium /mnocarpium /mnocarpium 1 /polepis :ptoptens 3	dryopteris dryopteris robertianum millefolia	Plumosa		10						
vmnocarpium vmnocarpium 1 vpolepis iptoptens 3	dryopteris robertianum millefolia	Plumosa	0.15	10	7	5	WTYJ			95/53
rpolepis ptoptens 3	robertianum millefolia	Plumosa	OakFem	70	2		ERSGV			94/12.18.97
ptoptens 3	millefolia		Plumosa Oak Fern	20	2		RSGV	Me	NHem	95/108.1.12
ptoptens 3			LimestonOakfmRobert'sOa		2	16	ASEGN			94/9.12.45,97
			Thousand-leavedfrnDissect	el_	7	22	TGVME		NZ	L
	Hymenophylloides		crepe fern	1	7	30	OWHS		NZ	95/9
inathynum	japonicum		Japanese lady fern	10	6	22	EANTK		S&SE&E asia	94/45 93/36
copodium	Annotinum		running pine	5	3	3	OLTZN		Cosmo	
copodium	dendroideum		PricktyTreeClubMssPrinces	12	2	9	QLZW		Nor.N.A.NEasia	92/117
copodium	tristachyum		blue ground cedar	3	13	6	QLTNZ		NE N. Am	93/9
godium	japonicum		Japanese climbing frn	20				SW Miss,TX	S&SEasia,Aus	95/52.163
godium 1	palmatum		AmericanFn.Hartfordfn.Clin		3		CWZT			94/8
atteuccia	orientalis		Oriental ostrich frn	40	5		EZN		far east	
atteuccia \$	struthiopteris		OstrichFernShuttlecockfrn			60	ZWSE			95/9 93/120
atteuccia \$	struthiopteris	asian form					ZWSE		Asia	000000120
atteuccia \$\$\$	struthiopteris		Ostrich Fern		2		ZWSE			95/8 94/120
		Pennsylvanica	Ostrich Fen			36	ZWSE.	NW Aus		94/94
ephrolepis	Obliterata	Kimberly Queens	lalask form	12	7	24	QUDA	NVY AUS	SwUs,C&S am	92/104
otholaena	sinuata	sinuata	cloak fern	60					NHemAsia	
noclea \$	sensibilis		Sensitive Fem. mountain fern	10	2	24	WUGZ	Scotland	Eur N.A.	94/9
eoptens (Thelyptens					4	40				
smunda \$\$\$	cinnamomea		Cinnamon Fern		3		WZVEK		Cosmo	95/8 94/150
smunda \$\$\$	claytoniana		Interrupted Fem	5			ZWSV	ме		95/8
smunda \$\$\$	regalis			20			ZWSO			95/8.163.108
smunda \$\$\$	regalis	Cnspa	Crested royal fem		3		ZWSVK			95/25 94/25
smunda \$\$\$	regalis	Cristata	crested royal fern		3		ZWSVK		Cosmo	94/25
smunda \$\$\$	regalis	gracilis	RoyalFern,FloweringFern	1	4	48	ZWSVK		N. Hem	94/5
smunda \$\$\$	regalis	Japonica(Dimorphic)		1	4	48	ZWSVK		N. Hem	94/5
smunda \$\$\$	regalis	purpurescens	purple stemmed royal frn	10		72	ZWSVK		Cosmo	94/25,150 92/
smunda \$\$\$	Regalis	regalis	RoyalFern,FlowaringFern			90	ZWSVK		Cosmo	94/25
smunda \$\$\$	regalis	regalis Purpurascans	PurpleRovalFern.Flowering	10	3	90	ZWSVK		Cosmo	95/110 94/25
smunda \$\$\$	regalis	spectabilis	RoyalFarn, FloweringFern	10		90	ZWSVK		Cosmo	95/25 93/9,15
smunda \$\$\$	regalis	Undulatum	RoyalFern,FlowaringFern	1	4	48	ZWSVK		N. Hem	94/5
smunda 23\$\$\$	Japonica				6	32	EYZW		E&SAsia, Philipp.	95/110
ellaea	atropurpurea		Purpla Cliffbraka	5	3	16		Мехко	C&N.A.	95/1 94/140.8
ellaea	rotundifolia		button fern	13	7	6	DTZK		NZ	95/9.1
hanerophiebia	falcata			4	7	1				
hanerophlabia			1			1	1			
			beech fern		_	116	SNGVK	Wise Scotland	NHem	02/120
hyllitis										93/129
		Anguetdolia	Hade tongue fore		10	124	LADUSK			95/9.157.94/4
			1 Inans longue lein		4	24	AHNSK		IN Hem	95/2 94/9
			Linda tanang fara		4	101	AHNKO			10.00
					4	124	AHNSO			94/9
					4	124	TABUSK			94/9,154
hyllitis			Undulating Harts tongue fe		4	20	ARENS			94/9
hyllitis				16						94/9
hyllitis hyllitis	scolopendrium	Crispum Muricatum		13					N.Hem	95/2
hyllitis hyllitis hyllitis 2	scolopendrium	Digitatum		3					N.Hem	95/2
hyllitis hyllitis hyllitis 2 hyllitis 2	and an instruction	Rhodesian crested			4	24	ABNSK		N.Hem	95/157
hyllitis hyllitis hyllitis 2 hyllitis 2 hyllitis 2	Iscolopenarium	Sagittatum cristatum		13	4	24	ABNSK			95/2
hyllitis hyllitis hyllitis 2 hyllitis 2	scolopendrium		southern polypody	8	6	18	1			92/41
hyllitis hyllitis hyllitis 2 hyllitis 2 hyllitis 2							JNT			92/41
hyllitis hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 olypodium	scolopendrium Australa	Dentatum								92/41
hyllitis hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 olypodium olypodium	scolopendrium Australa australe						JNT	<u>+</u>	( - igiano	
hyllitis hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 olypodium olypodium	scolopendrium Australa australe australe	omnikaerum oxford				18				02/41
hyllitis hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 ohypodium olypodium olypodium olypodium	scolopendrium Australa australe australe australe	omnikaerum oxford SemilacerumFalcatum							Eur	92/41
hyllitis hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 ohypodium ohypodium ohypodium olypodium olypodium	scolopendrium Australa australe australe australe australe australe Semilacerum	omnikaerum oxford SemilacerumFalcatum falcatum O'kelly	southern polypody	8			JNT		Eur England	92/41
hyllitis hyllitis 2 hyllitis 2 hyllitis 2 ohypodium ohypodium ohypodium ohypodium ohypodium ohypodium	scolopendrium Australa australe australe australe australeSemilacerum australeSemilacerum	omnikaerum oxford SemilacerumFalcatum falcatum O'kelly robustum	southern polypody southern polypody	8	6	18	JNT		Eur England England	92/41 92/41
hyllitis hyllitis 2 hyllitis 2 hyllitis 2 hyllitis 2 ohypodium ohypodium ohypodium olypodium olypodium	scolopendrium Australa australe australe australe australe australe Semilacerum	omnikaerum oxford SemilacerumFalcatum falcatum O'kelly	southern polypody	8	6	18	JNT		Eur England	92/41
sn ell ha he hy hy	nunda 855 nunda 2.3 \$55 aea aea nerophlabia gopters liitus liitus liitus liitus liitus liitus liitus liitus liitus liitus liitus liitus liitus liitus liitus	nunda \$25\$         regalis           nunda \$23\$\$\$         Japonica           aea         atropurpurea           aea         rotundifolia           nerophilabia         fortunei           gopteris         connectilis           ititis         scolopendrium           lititis         scolopendrium           lititis 2         scolopendrium           lititis 2         scolopendrium           lititis 2         scolopendrium           lititis 2         scolopendrium	nunda \$2\$\$         regalis         Undulatum           nunda \$23\$\$\$         Japonica         Japonica           aea         atropurpurea         Japonica           aea         atropurpurea         Japonica           aea         rotundifolia         Incorphilabia           nerophilabia         fortunei         Japonica           gopters         connectilis         Incorphilabia           liftis         scolopendrium         Angustifolia           liftis         scolopendrium         Kayes Lacerate           liftis         scolopendrium         scolopendrium           liftis         scolopendrium         scolopendrium           liftis         scolopendrium         Indicata           liftis         scolopendrium         Scolopendrium           liftis         scolopendrium         Vindiata           liftis         scolopendrium         Digitatum           liftis 2         scolopendrium         Digitatum           liftis 2         scolopendrium         Rhodesian crested           liftis 2         scolopendrium         Sagitatum cristatum           repolium         Australa         Cristatum old form           rpodium         australe         Dentatum	nunda 23 \$\$\$         regalis         Undulatum         RoyalFern,FloweringFern           nunda 23 \$\$\$         Japonica         RoyalFern,FloweringFern           aea         atropurpurea         Purpla Cillforaka           aea         atropurpurea         Purpla Cillforaka           aea         falcata         button fern           nerophibaia         fortunei         button fern           gopters         connectilis         beech fern           litits         scolopendrium         Angustifolia           litits         scolopendrium         Kayes Lacerate           litits         scolopendrium         reaginata           litits         scolopendrium         scolopendrium           litits         scolopendrium         Harts tongue fern           litits         scolopendrium         Vaduata         Undulatina Harts tongue fern           litits         scolopendrium         wild-talay         Undulatina Harts tongue fern           litits         scolopendrium         Wild-talay         Undulatina Harts tongue fern           litits 2         scolopendrium         Scolopendrium         Harts tongue fern           litits 2         scolopendrium         Bagitatium         Induatina Harts tongue fern	nunda \$SS         regalis         Undulatum         RoyalFern,FloweringFern         1           nunda 2 3 \$SS         Japonica         RoyalFern,FloweringFern         20           aea         atropurpurea         Purpla Cillforaka         5           aea         rotundifolia         button fern         13           nerophiebia         falcata         14         5           aenorphiebia         falcata         5         5           gopters         connectilis         beech fern         40           litis         scolopendrium         Angustifolia         Harts tongue fern         6           litis         scolopendrium         Kayes Lacerate         1         1           litis         scolopendrium         scolopendrium         Harts tongue fern         2           litis         scolopendrium         scolopendrium         Harts-tongue Fern         3           litis         scolopendrium         undulata         Undulatina Harts tongue fern         2           litis 2         scolopendrium         Orgatum         3         3           litis 2         scolopendrium         Digatum         3         3           litis 2         scolopendrium         Scolopendrium         <	nunda 23SS         regalis         Undulatum         RoyalFern,FlowaringFern         1         4           nunda 23SS         Japonica         RoyalFern,FlowaringFern         1         6           aea         atropripurea         Purpla Cliffbraka         5         3           aea         rotundiolia         button fern         13         7           nerophibua         falcata         button fern         13         7           nerophibua         forunet         4         7           gopteris         connectilis         beech fern         40         5           liftis         scolopendrium         Angustifolia         Harts tongue fern         6         4           liftis         scolopendrium         Angustifolia         Harts tongue fern         2         4           liftis         scolopendrium         scolopendrium         Harts tongue fern         2         4           liftis         scolopendrium         scolopendrium         Harts tongue fern         2         4           liftis         scolopendrium         scolopendrium         Undulata         4         1         4           liftis         scolopendrium         Grerspum Muricatum         3         4	nunda 23SS         regalis         Undulatum         RoyalFern,FlowaringFern         1         4         48           hunda 23SS         Japonica         RoyalFern,FlowaringFern         20         6         32           aea         atropurpurea         Purpla Cil/Braka         5         1         6         32           aea         rotundifolia         button fern         13         7         6           aea         rotundifolia         button fern         13         7         6           aea         fortunei         4         7         7         6           gopters         connectilis         beech fern         40         5         16           filts         scolopendrium         Angustfolia         Harts tongue fern         6         4         24           liftis         scolopendrium         Kayes Lacerate         1         1         12           liftis         scolopendrium         marginata         Harts tongue fern         2         4         24           liftis         scolopendrium         marginata         Harts tongue fern         3         4         24           liftis         scolopendrium         crespum Murcatum         1	nunda 23 \$\$\$         regais         Undulatum         RoyalFern,FloweringFern         1         4         8         ZWSVM           aea         Atoponica         RoyalFern,FloweringFern         20         6         32         EYZVM           aea         atoponica         Purpla Cillbraka         5         3         16         UADEX           aea         rotundiolia         button fern         13         7         6         DTZ           nerophibaia         fortunei         4         7         7         5         7         5           gopteris         connectilis         beech fern         40         5         16         SNGVK           liftis         scolopendrium         Angustifolia         Harts tongue fern         6         4         24         ARNSK           liftis         scolopendrium         Kayes Lacerate         1         1         12         ARNSK           liftis         scolopendrium         marginata         Harts tongue fern         2         4         24         ARNSK           liftis         scolopendrium         marginata         Harts tongue fern         3         4         24         ARNSK           liftis         scolopendrium <td>nunda 23SS     regalis     Undulatum     RoyalFern,FloweringFern     1     4     48     ZWSVK       nunda 23SS     Japonica     RoyalFern,FloweringFern     10     6     32     EYzW       aea     atropruprea     Purpla Cliftbraka     5     3     16     UADEK Mexco       aea     rotundiolia     button tern     13     7     6     DTZK       aea     fotundiolia     button tern     13     7     6     DTZK       nerophibabia     fotunei     4     7     7     7       gopteris     connectilis     bech fern     40     5     16     SNGVK Wisc, Scotland       liftis     scolopendrium     Angustifolia     Harts tongue fern     6     4     24     ARNSK       liftis     scolopendrium     Kayes Lacerate     1     4     24     ARNSK       liftis     scolopendrium     marginata     Harts tongue fern     2     4     24     ARNSK       liftis     scolopendrium     undulata     Undulatina Harts tongue fern     3     4     24     ARNSK       liftis     scolopendrium     wird*Ialw     6     4     24     ARNSK       liftis     scolopendrium     Wird*Ialw     16</td> <td>nunda 23SS     regalis     Undulatum     RoyalFarn,FlowaringFarn     1     4     48     ZWSVK     N. Hem       nunda 23SSS     Japonica     RoyalFarn,FlowaringFarn     10     6     32     EYZW     E&amp;SAsia,Philipp.       aea     atropurpurea     Purpla Cilifbraka     5     16     UADEX     Mexico     C&amp;A.A.       aea     fotundfolia     button fern     13     7     6     DTZK     N. Hem       nerophlabia     fotunei     4     7     Image 20     Consection     N. Hem       gopteris     connectiis     beech fern     40     5     16     SNGVK Wisc,Scotland     N. Hem       liftis     scolopendrium     Angustifolia     Harts tongue fern     6     4     24     ARNSK     M. Hem       liftis     scolopendrium     Magustifolia     Harts tongue fern     2     4     24     ARNSK     N. Hem       liftis     scolopendrium     marginata     Harts tongue fern     3     4     24     ARNSK     N. Hem       liftis     scolopendrium     mudulata     Undulatina Harts tongue fern     3     4     24     ARNSK     N. Hem       liftis     scolopendrium     undulata     Undulatina Harts tongue fern     3     &lt;</td>	nunda 23SS     regalis     Undulatum     RoyalFern,FloweringFern     1     4     48     ZWSVK       nunda 23SS     Japonica     RoyalFern,FloweringFern     10     6     32     EYzW       aea     atropruprea     Purpla Cliftbraka     5     3     16     UADEK Mexco       aea     rotundiolia     button tern     13     7     6     DTZK       aea     fotundiolia     button tern     13     7     6     DTZK       nerophibabia     fotunei     4     7     7     7       gopteris     connectilis     bech fern     40     5     16     SNGVK Wisc, Scotland       liftis     scolopendrium     Angustifolia     Harts tongue fern     6     4     24     ARNSK       liftis     scolopendrium     Kayes Lacerate     1     4     24     ARNSK       liftis     scolopendrium     marginata     Harts tongue fern     2     4     24     ARNSK       liftis     scolopendrium     undulata     Undulatina Harts tongue fern     3     4     24     ARNSK       liftis     scolopendrium     wird*Ialw     6     4     24     ARNSK       liftis     scolopendrium     Wird*Ialw     16	nunda 23SS     regalis     Undulatum     RoyalFarn,FlowaringFarn     1     4     48     ZWSVK     N. Hem       nunda 23SSS     Japonica     RoyalFarn,FlowaringFarn     10     6     32     EYZW     E&SAsia,Philipp.       aea     atropurpurea     Purpla Cilifbraka     5     16     UADEX     Mexico     C&A.A.       aea     fotundfolia     button fern     13     7     6     DTZK     N. Hem       nerophlabia     fotunei     4     7     Image 20     Consection     N. Hem       gopteris     connectiis     beech fern     40     5     16     SNGVK Wisc,Scotland     N. Hem       liftis     scolopendrium     Angustifolia     Harts tongue fern     6     4     24     ARNSK     M. Hem       liftis     scolopendrium     Magustifolia     Harts tongue fern     2     4     24     ARNSK     N. Hem       liftis     scolopendrium     marginata     Harts tongue fern     3     4     24     ARNSK     N. Hem       liftis     scolopendrium     mudulata     Undulatina Harts tongue fern     3     4     24     ARNSK     N. Hem       liftis     scolopendrium     undulata     Undulatina Harts tongue fern     3     <

	GENUS	SPECIES	CVR			Z	SZE	GRO	COLL.SITE	ORIG	DONOR
244	Polypodium Polypodium	interjectum	Glomertum Mullins	see microsorum punctatum							95/9 92/41
	Polypodium	interjectum polypodiodes	Giomentum Mullins	Resurrectionfern.GravPolvn		6	8	DRZGE			94/9
	Polypodium	scoulen		leather polypody			14		Wash.	N.Am	95/10.27.1
	Polypodium	virginianum		Am.Wallfern.Rockpolypody		2	14		Wisc,Me		94/9.8 93/12
	Polypodium	vulgare		Common Polypody	10	5		NTJK	Switz, Me	N Hem	94/9 93/9.38
16	Polypodium	vulgare	prionodes				14	NTJK		Cosmo	94/9
	Polypodium 1	amorphum -		Irregularpolypod.MountainF	90	6	12	R	Orea.ColumBvr	Pacific NW	94/97
	Polypodium 3	australe	Grandiceps Forster	southern polypody	2		18	JNT		Eur	92/41
	Polystichum	acrostichoides		Christmas Fern	40	3	28		Me,Mich,Wa,Va,Wisc		95/161.52.10
	Polystichum	acrostichoides	multifidum		1		30	SNOK		N.Am	95/141 93/13
	Polystichum	aculeatum	-	Hard Sheild Fern	30	4	30	EASRG		Eur, N India	94/9.36.45.1
	Polystichum	aculeatum	Bornim	Hard Sheild Fern	1	4	24	ASRNG		Eur, N India	94/45,104,97
	Polystichum	aculeatum	Nrrw,split form	Hard Sheild Fern	10	4	24	ASRNG		Eur, N India	
	Polystichum Polystichum	braunii			60	3	28	ANT		N. Hem California	95/141.108.
	Polystichum	californicum		Cal.HollyfemCal.Swordfern	22	7	30		Is Of Madiera	S.EurMadg	93/12 92/12
	Polystichum	falcinellum imbricans		Imbridge Currentler Durantit	30	3	24	SNK		WNAm	94/97 93/7
	Polystichum	lemmoni		ImbricantSwordfrn.DwarfW Shasta Holly fern		6	12	TNLK		W NAm-	93/28,132
	Polystichum	lepidocaulon			2	7	24			Easia	93/43
330	Polystichum	lobatum			30	6	12			Ch	93/9 93/12
	Polystichum	Ionchitis		Northen Holly fern	30	3	18	ASWO		N Hem	94/9.45.104
32	Polystichum	makinoi		Makino's holly fern	20	5	24	EKNOT		CH, Jap	95/2.12 94/
33	Polystichum	mayebarae			5	6	18	TNK		ChJap	94/36 93/36
	Polystichum	mohriodes		p.lemmoni	30	5	14			Ch,W NAm	93/12 92/12
		mohriodes	Elegans		4	5	12	R		Ch,W N.Am	95/12 92/9
	Polystichum	munitum		WeeternSword Fern	60	5	58	SNOK		W N.Am	94/12 93/38
	Polystichum	Munitum	Twisted Pinna	Sword Fern	20	5	36	SNKO		W N.Am	94/25
	Polystichum	neolobetum		Long-eered holly fern	28	5	24	ENOKS		JpChNep Him	93/7,36,45,
	Polystichum	polyblepharum	Develop	Tasselfrn Japanese Lacefrn		5		SZEK	Jap	JpChKor	94/9.156
	Polystichum	polyblepharum	Bornim	Tasselfrn.JapaneseLacefm	<b>3</b> 15		24	SZEK NTEK	Jap	JpChKor Aus	94/9
	Polystichum Polystichum	proliferum		Mother sheild fern	30		36	SNEKO		JpChKor	
	Polystichum	retroso-paleaceum ngens		Rigid Holly frn	15		24	KNT		JpChKor	94/36.45.38
	Polystichum	setiferum		Soft Shield Fern	99	5	40	TNKE	Fr,Switz,Cauc,Wales	Europe	95/9.12
	Polystichum	Setiferum	Acutilobum	Soft Shield Fern	5	5	40	TNK	FI, SWILZ, Cauc, Wales	Europe	92/45
	Polystichum	setiferum	Congestum	Soft Shield Fern	15	5	40	TNK		Europe	95/2 94/150
	Polystichum	setiferum	Cristata Bouchert	Soft Shield Fern	3		40	TNK		Europe	93/97
	Polystichum	setiferum	dahlem	soft shield fern	18		40	TN		Eur	94/12,45
	Polystichum	setiferum	divisilobum cristatum	Soft Shield Fern	5	6	40	TN		Europe	94/97
	Polystichum	Setiferum	foliosum	soft sheild fern	2	6	36	TN		Eur	94/9
351	Polystichum	setiferum	Herrenhausen	Soft Shield Fern	6	5	40	TNK		Europe	
352	Polystichum	setiferum	Linearis type	Soft Shield Fern	6	5	40	TNK		Europe	ļ
	Polystichum	setiferum	Perserretum	Soft Shield Fern	5	5	40	TNK		Europe	92/101
	Polystichum	setiferum	proliferum	Soft shield fern	3	5	40	TN		Eur	94/9
	Polystichum	setiferum	proliferumWollastonii	soft shield fern	2	6	40	NT		Eur	94/9
	Polystichum	setiferum	RotundCristatum	Crested Soft Shield Fern	5	5	40	TNK ·		Europe	94/20
	Polystichum	squarrosum		Trifiel Halls do no	20 25	7	18	NTK NTE		EurIndiaHimalaya	
	Polystichum Polystichum	tripteron tsus-simense		Trifid Holly fem KoreanBockfrn.Tsu-simaH		6	18	ZSNKE	Wakayama, Jp.	Easia Ch Jp Kor	95/12.94/82
	Polystichum	vestitum		Prickly shield fern	15	6	36	TSKE	TaupoNZ	AusNZ	95/9 92/55
	Polystichum	woronowii			4	17	100				
	Polystichum	x illyricum			40	5	1	1		SEur	94/45,97 93
	Polystichum	Xiphophyllum		sword leef fern	2	7	20	1		Chin, Twaiwan	
	Polystichum 1	andersonii		andersons holly fern	40	6	36	WSRK	Mt	NW N.Am	95/1 94/97
365	Polystichum 1	dudleyi		dudley's holly fern	8	6	36	TNK		Calif.	92/36
	Polystichum 1	setigerum		AlaskaSwordfern.AlaskHol	70	2	48	SNK		NW NAm	94/12
	Polystichum 2	Richardii		Richards Holly fern	10		24	KN		NZ	95/9
68	Polystichum 3	setiferum	Conspiculobum	Soft Shield Fern	3		40	TN		Europe	94/45
369		setiferum	Conspicupinnulum	Soft Shield Fern	4	6	40	TN		Europe	94/45
			divisilobum angustatum	Soft Shield Fern		6	40			Europe	94/45
370	Polystichum 3	setiferum			3						
870 871	Polystichum 3	setiferum	Mrs Hughes	Soft Shield Fern	3	6	40	TN		Europe	94/45
370 371 372	Polystichum 3 Polystichum 3	setiferum setiferum		Soft Shield Fern crested Soft Shield Fern	3 5	6 6	40	TN TN		Europe Europe	94/45 95/141 94/
870 871 872 873	Polystichum 3 Polystichum 3 Pteris	setiferum setiferum multifida	Mrs Hughes	Soft Shield Fern crested Soft Shield Fern SpiderBrake,ChineseBrake	3 5 4	6 6	40 40 20	TN TN NTREA		Europe Europe JapCh	94/45 95/141 94/ 95/9 93/10
70 71 72 73 74	Polystichum 3 Polystichum 3 Pteris Pyrrosia 3	setiferum setiferum multifida lingua	Mrs Hughes	Soft Shield Fern crested Soft Shield Fern SpiderBrake,ChineseBrake Tongue fn,Jep felt fern	3 5 4 9	6 6 6	40 40 20 10	TN TN NTREA DUZGJ		Europe Europe JapCh E&SE Asie	94/45 95/141 94/ 95/9 93/10 95/9 94/27
370 371 372 373 374 375	Polystichum 3 Polystichum 3 Pteris Pyrrosia 3 Selaginella 3	setiferum setiferum multifida lingua Kraussiena	Mrs Hughes	Soft Shield Fern crested Soft Shield Fern SpiderBrake, ChineseBrake Tongue fn, Jep feit fern Krauss's spikemoss	3 5 4 9	6 6 6 6	40 40 20 10 1/2	TN TN NTREA DUZGJ KGW		Europe Europe JapCh E&SE Asie Af,Azores	94/45 95/141 94/ 95/9 93/10 95/9 94/27 94/143
370 371 372 373 374 375 376	Polystichum 3 Polystichum 3 Pteris Pyrrosia 3 Selaginella 3 Thelypteris	setiferum setiferum multifida lingua Kraussiena decursive-pinnata	Mrs Hughes	Soft Shield Fern crested Soft Shield Fern SpiderBrake, ChineseBrake Tongue In, Jep felt fern Krauss's spikemoss WingedBeech, JapanesBer	3 5 4 9 1 7	6 6 6 4	40 40 20 10 1/2 24	TN TN NTREA DUZGJ KGW ENT	Va.Me	Europe Europe JapCh E&SE Asie Af,Azores EurS&Easia	94/45 95/141 94/ 95/9 93/10 95/9 94/27 94/143 95/141 94/
970 971 972 973 974 975 976 976	Polystichum 3 Polystichum 3 Pteris Pyrrosia 3 Selaginella 3 Thelypteris Thelypteris	setiferum setiferum multifida lingua Kraussiena decursive-pinnata hexagonoptera	Mrs Hughes	Soft Shield Fern crested Soft Shield Fern SpiderBrake, ChineseBrake Tongue fn, Jep felt fern Krauss's spikemoss WindedBeech, JapanesBer BroadBeech, Fern, Southern	3 5 4 9 1 7 20	6 6 6 4 4	40 40 20 10 1/2 24 20	TN TN NTREA DUZGJ KGW ENT SZNEO	Va,Me	Europe Europe JapCh E&SE Asie At,Azores EurS&Easia E NAm	94/45 95/141 94// 95/9 93/10 95/9 94/27 94/143 95/141 94/ 93/9,126 \$
970 971 972 973 974 975 976 976 977 978	Polystichum 3 Polystichum 3 Pteris Pyrrosia 3 Selaginella 3 Thetypteris Thetypteris Thetypteris	setiferum setiferum multifida lingua Kraussiena decursive-pinnata	Mrs Hughes	Soft Shield Fern crested Soft Shield Fern SpiderBrake, ChineseBrake Tongue fn, Jep felt fern Krauss's spikemoss WindedBeech-JapanesBer BroadBeechFern.Southem BroadSechTern.Southem	3 5 4 9 1 7 820 430	6 6 6 4 4 7	40 40 20 10 1/2 24 20 36	TN TN NTREA DUZGJ KGW ENT SZNEQ GNRET	Va,Me	Europe Europe JapCh E&SE Asie Af,Azores EurS&Easia E NAm SE US	94/45 95/141 94/ 95/9 93/10 95/9 94/27 94/143 95/141 94/ 93/9,126 9 95/27 94/9
370 371 372 373 374 375 376 376 377 378 379	Polystichum 3 Polystichum 3 Pteris Pyrrosia 3 Selaginella 3 Thelypteris Thelypteris	setiferum setiferum multifida lingua Kraussiena decursive-pinnata hexagonoptera kunthi	Mrs Hughes	Soft Shield Fern created Soft Shield Fern SpidelBack, ChineseBrake Tongue In, Jep felt fern Krauss's spikemoss WindedBeach. JapanesBei BroadBeach Fern. Southem DecidSouthShieldtern. Rived Lemon-scentedfurn. Nevedah	3 5 4 9 1 7 20 7 20 7 20 7 20 7 20 7 20 7 20	6 6 6 4 4 7 4	40 40 20 10 1/2 24 20 36 40 25	TN TN NTREA DUZGJ KGW ENT SZNEQ GNRET ZRUN TWEK		Europe Europe JapCh E&SE Asie At,Azores EurS&Easia E NAm	94/45 95/141 94/ 95/9 93/10 95/9 94/27 94/143 95/141 94/ 93/9,126 9 95/27 94/9
370 371 372 373 374 375 376 376 377 378 379 380	Polystichum 3 Polystichum 3 Pteris Pyrrosia 3 Selaginella 3 Thehypteris Thehypteris Thehypteris Thehypteris	setiferum setiferum multifida lingua Kraussiena decursive-pinnata hexagonoptera kunthi limbosperma	Mrs Hughes	Soft Shield Fern crested Soft Shield Fern SpiderBrake, ChineseBrake Tongue fn, Jep felt fern Krauss's spikemoss WindedBeech-JapanesBer BroadBeechFern.Southem BroadSechTern.Southem	3 5 4 9 1 7 20 20 25 20 20 28	6 6 6 4 4 7 4 4 4	40 40 20 10 1/2 24 20 36 40 25 18	TN TN DUZGJ KGW ENT SZNEQ GNRET ZRUN TWEK	Va	Europe Europe JapCh E&SE Asie Af,Azores EurS&Easia E NAm SE US Eur,NAm	94/45 95/14194/ 95/993/10 95/994/27 94/143 95/14194/ 93/9,1269 95/2794/9 95/1,1292
370 371 372 373 374 375 376 377 378 379 380 381	Polystichum 3 Polystichum 3 Ptens Pyrrosia 3 Selaginella 3 Thetypteris Thetypteris Thetypteris Thetypteris Thetypteris	setiferum setiferum multifida lingua Kraussiena decursive-pinnata hexagonoptera kunthi limbosperma nevadensis	Mrs Hughes	Soft Shield Fern created Soft Shield Fern SpidelBack, ChineseBrake Tongue In, Jep felt fern Krauss's spikemoss WindedBeach. JapanesBei BroadBeach Fern. Southem DecidSouthShieldtern. Rived Lemon-scentedfurn. Nevedah	3 5 4 9 1 7 20 25 20 28 8	6 6 6 4 4 7 4 4 4 2	40 40 20 10 1/2 24 20 36 40 25 18 30	TN NTREA DUZGJ KGW ENT SZNEQ GNRET ZRUN TWEK ZTNEG WZSK	Va	Europe JapCh E&SE Asie Af,Azores EurS&Easia E NAm SE US Eur,NAm NW N Am	94/45 95/14194/ 95/993/10 95/994/27 94/143 95/14194/ 93/9,1265 95/2794/9 95/1,1292 94/97
370 371 372 373 374 375 376 376 376 377 378 379 380 3881 3882 3883	Polystichum 3 Polystichum 3 Prens Pyrosia 3 Selaginella 3 Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris	setiferum setiferum multifida lingua Kraussiena decursive-pinnata hexagonoptera kunthii limbosperma nevadensis noveboracensis	Mrs Hughes Rotundatum	Soft Shield Fern crested Soft Shield Fern SpidelBrake, ChineseBrake Tongue (n, Jep felt fern Krauss's spikemoss WindedBeech, JapanesBe BroadBeech, JapanesBe BroadBeech Fern, Southern DeodSouthShieldfern, Rive Lemon-scentedIm, Sweetk Newadamarshtern, Newada New YorkFern, Tepenngtm Marsh fern marsh fern	3 5 4 9 1 20 25 20 25 20 25 20 28 8 15	6 6 6 4 4 7 4 4 4 2 4	40 40 20 1/2 24 20 36 40 25 18 30 18	TN NTREA DUZGJ KGW ENT SZNEQ GNRET ZRUN TWEK ZTNEG WZSK	Va	Europe Europe JapCh E&SE Asie Af,Azores EurS&Easia E NAm SE US Eur,NAm N.W N Am N.M NAm Eur,NAm	94/45 95/141 94/ 95/9 93/10 95/9 94/27 94/143 95/141 94/ 95/141 94/ 95/141 94/ 95/27 94/2 95/27 94/2 95/27 94/9 95/1,12 92 94/97 93/9,126 95/9 92/3 95/9 92/3
370 371 372 373 374 375 376 377 378 379 380 381 382 3883 3883	Polystichum 3 Polystichum 3 Prens Pyrosia 3 Stelaginella 3 Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris	setterum multrida lingua Kraussiona decursive-pinnata hexagonoptera kunthii limbosperma nevadensis noveboracensis palustins palustins palustins	Mrs Hughes Rotundatum	Soft Sheid Fern crested Soft Sheid Fern SpiderBrake, ChineseBrake Tongue In, Jep felt fern Krauss's spikemoss WinaedBeech-JapanesBe- BroadBeech-Fern, Southern DecidSouthSheidtern, Rive Lemon-scented/in.Sweit/N Nevadamarshfern, Nevadal Nevadamarshfern, Mevadal Marsh fern marsh fern	3 5 4 9 1 7 820 25 20 225 20 228 8 15 6	6 6 6 4 4 7 4 4 4 2 4 4	40 40 20 10 1/2 24 20 36 40 25 18 30 18 30	TN TN NTREA DUZGJ KGW ENT SZNEQ GNRET ZRUN TWEK ZTNEG WZSK WZGS	Va SuffkEng	Europe Europe JapCh E&SE Asie EurS&Easia E US Eur,NAm NW N Am N.Am Eur,NAm Eur,NAm	94/45 95/14194/ 95/993/10 95/994/27 94/143 95/14194/ 95/14194/ 95/14194/ 95/2794/9 95/2794/9 95/2794/9 93/9,126 95/992/3 92/24 92/9
370 371 372 373 374 375 376 376 376 377 378 379 380 381 382 388 384 384 385	Polystichum 3 Polystichum 3 Perses Pyrrosia 3 Selaginella 3 Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris	setiferum setiferum multifuda lingua Kraussiena decursive-pinnata hexagonoptera kunthi limbosperma nevadensis noveboracensis palustris palustris	Mrs Hughes Rotundatum	Soft Shield Fern created Soft Shield Fern SpiderBrack, ChineseBrack Tongue fn, Jep feit fern Krauss's spikemoss WineddBeech-JapanesBe- BroadBeech-Eem.Southern DeoidSouthShieldfern Rive Lemon-scentedfm. Swedth Newadamaishtern.Nevadal NewYorkFern, Tepenngtm Marsh fern marsh fern MarowBeechfern.Northerm	3 5 4 9 1 7 20 25 20 28 8 15 6 8 25	6 6 6 4 4 7 4 4 4 2 4 4 2	40 40 20 10 1/2 24 20 36 40 25 18 30 18 30 24	TN TN NTREA DUZGJ KGW ENT SZNEQ GNRET ZRUN TWEK ZTNEG WZSK WZGS SNZOK	Va SuffkEng	Europe Europe JapCh E&SE Asie Af,Azores EurS&Easia E NAm SE US Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm	94/45 95/14194/ 95/993/10 95/994/27 94/143 95/14194/ 93/9,126 95/2794/9 95/1,1292 94/97 93/9,126 95/992/3 92/992/3 92/9 92/9
370 371 372 373 374 375 376 377 378 377 378 377 378 377 378 377 378 377 378 380 381 382 383 384 385 386	Polystichum 3 Polystichum 3 Prens Pyrosia 3 Selaginella 3 Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris	setiferum setiferum multifuda lingua Kraussiena decursive-pinnata decursive-pinnata decursive-pinnata decursive-pinnata kunthi limbosperma nevadensis nevadensis palustins palustins palustins phegopteris simulata	Mrs Hughes Rotundatum	Soft Sheid Fern crested Soft Sheid Fern SpiderBrake, ChineseBrake Tongue In, Jep felt fern Krauss's spikenoss WindedBeech.JapanesBei BroadBeech.Fern.Southem DecidSouthSheidtern.Rive Lemon-scentedIm.SweetM Nevadamarshfern.Nevadal Nevadamarshfern Marsh fern marsh fern Ma	3 5 4 9 1 7 20 25 20 28 8 15 6 225 30	6 6 6 6 4 4 4 4 2 4 4 2 4 4 4 2 4	40 40 20 10 1/2 24 20 36 40 25 18 30 18 30 24 24	TN TN NTREA DUZGJ KGW ENT SZNEC GNRET ZRUN TWEK ZTNEG WZSK WZGS WZGS SNZOK WZT	Va Va SuffkEng LavaBeds Wa	Europe Europe JapCh JapCh E&SE Asie Af,Azores EurS&Easia E NAM SE US Eur,NAM Eur,NAM Eur,NAM Eur,NAM Eur,NAM	94/45 95/141 94/ 95/9 93/10 95/9 94/27 94/143 95/141 94/ 93/9,126 95/27 94/9 95/1,12 92 94/97 93/9,126 95/9 92/3 95/9,126 95/9 92/3 92/24 92/9 94/12,97 95/141 93/
370 371 372 373 374 375 376 377 378 376 377 378 377 378 377 378 377 378 379 380 381 382 383 384 385 386 387	Polystichum 3 Polystichum 3 Perens Pyrrosia 3 Selaginella 3 Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris 1	settferum settferum multifuda lingua Kraussiena decursive-pinnata hexagonoptera kunthii limbosperma nevadensis nevadensis palustris palustris palustris palustris palustris simulata Dentata	Mrs Hughes Rotundatum	Soft Shield Fern created Soft Shield Fern SpiderBrack, ChineseBrack Tongue fn, Jep feit fern Krauss's spikemoss WineddBeech-JapanesBe- BroadBeech-Eem.Southern DeoidSouthShieldfern Rive Lemon-scentedfm. Swedth Newadamaishtern.Nevadal NewYorkFern, Tepenngtm Marsh fern marsh fern MarowBeechfern.Northerm	3 5 4 9 1 20 20 20 20 20 225 20 228 8 15 6 225 30 3 3	6 6 6 6 4 4 7 4 4 4 4 2 4 4 2 4 6	40 40 20 10 1/2 24 20 36 40 25 18 30 24 24 24 20	TN TN NTREA DUZGJ KGW ENT SZNEC GNRET ZRUN TWEK ZTNEG WZSK WZGS SNZOK SNZOK WZT	Va Va SuffkEng IavaBeds Wa	Europe Europe JapCh E&SE Asie Af,Azores EurS&Easia E NAm SE US Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Pur,NAm Pur,NAm	94/45 95/14194/ 95/993/10 95/994/27 94/143 95/14194/ 95/1,1292 94/97 93/9,126 95/27,24/97 93/9,126 95/27,24/97 93/9,126 95/992/3 92/24 92/9 94/12,97 94/12,97 95/14192/ 95/14192/ 94/156 93/
370 371 372 373 374 375 376 376 377 378 379 380 381 382 388 384 385 386 387 388	Polystichum 3 Polystichum 3 Perss Pyrosia 3 Selaginella 3 Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris 1	setiferum setiferum multifida lingua Kraussiena decursive-pinnata hexagonoptera kunthii limbosperma nevadensis noveboracensis palustins palustins palustins palustins palustins palustins palustins palustins palusta palusta palusta palusta palusta palusta	Mrs Hughes Rotundatum	Soft Shield Fern created Soft Shield Fern SpiderBrack, ChineseBrack Tongue fn, Jep feit fern Krauss's spikemoss WinedBleech-LapanesEe BroadBeechFern, Southern DeordSouthShieldfern Rive Lemon-scentedfm. Swedth NewYorkFern, Tepenngtm Marsh fern marsh fern marsh fern Massechusettsfern, Bogfern DownyMaiden, BlueStemfri	3 5 4 9 1 7 220 225 220 228 8 15 6 225 30 3 3 30	6 6 6 6 4 4 7 4 4 4 2 4 4 2 4 6 5	40 40 20 10 1/2 24 20 36 40 25 18 30 24 24 20 24 24 20 14	TN TN NTREA DUZGJ KGW ENT SZNEO GNRET ZRUN TWEK ZTNEG ZTNEG ZTNEG WZSK WZGS SNZOK WZT AHTKN TK	Va SuffkEng IavaBeds Wa Georg.Cauc	Europe           Europe           JapCh           E&SE Asia           Af,Azores           EurS&Easia           E NAM           SE US           Eur,NAM           N.Am           Eur,NAm           Eur,NAm           Eur,NAm           Eur,NAm           Eur,NAm           Eur,NAm           Eur,NAm           CAM           CAm	94/45 95/14194/ 95/993/10 95/993/10 95/993/27 94/143 95/14194/ 95/11292 94/97 93/9,126 95/92 92/24 92/25 95/14 92/ 95/14 92/ 95/14 92/ 95/14 92/ 92/24 92/24 92/25 95/14 92/ 95/14 92/ 95/14 92/ 95/14 92/ 92/24 92/24 92/24 92/25 95/14 92/ 95/14 92/ 95/14 92/ 95/14 92/ 95/24 92/24 92/24 92/25 95/14 92/ 95/14 92/ 95/12
370 371 372 373 374 375 376 377 378 379 380 381 382 388 388 388 388 388 388 388 388 388	Polystichum 3 Polystichum 3 Perss Pyrosia 3 Stelaginella 3 Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris Thelypteris	setiferum setiferum multifuda lingua Kraussiena decursive-pinnata hexagonoptera kunthi limbosperma nevadensis noveboracensis palustins p	Mrs Hughes Rotundatum	Soft Sheid Fern crested Soft Sheid Fern SpiderBrake, ChineseBrake Tongue In, Jep felt fern Krauss's spikenoss WindedBeech.JapanesBei BroadBeech.Fern.Southem DecidSouthSheidtern.Rive Lemon-scentedIm.SweetM Nevadamarshfern.Nevadal Nevadamarshfern Marsh fern marsh fern Ma	3 5 4 9 1 220 225 20 28 8 15 6 225 30 3 30 3 30 13	6 6 6 6 4 4 7 4 4 4 2 4 4 2 4 6 5 2	40 40 20 10 1/2 24 20 36 40 25 18 30 18 30 24 24 20 14 6	TN TN NTREA DUZGJ KGW ENT SZNEO GNRET ZRUN TWEK ZTNEG ZTNEG ZTNEG WZSK WZGS SNZOK WZT AHTKN TK	Va Va SuffkEng IavaBeds Wa	Europe         Europe           Europe         JapCh           E&SE Asie         E           EASE Asie         EurS&Easia           E UrS&Easia         E           NAM         Eur,NAm           Eur,NAM         Eur,NAM	94/45 95/141 94/ 95/9 93/0 95/9 93/0 95/9 93/0 95/141 94/ 93/9,126 95/141 94/ 93/9,126 95/141 94/ 95/1,12 92 94/97 93/9,126 95/9 92/2 94/12,97 94/12,97 95/141 93/
370 371 372 373 374 375 376 376 377 378 376 377 378 376 377 378 376 377 378 376 377 378 376 377 378 376 377 378 376 377 378 378 376 377 378 378 378 378 378 378 378 378 378	Polystichum 3 Polystichum 3 Perens Pyrosia 3 Setaginella 3 Thelypteris	setterum setterum multrida lingua Kraussiena decursive-pinnata hexagonoptera kunthi limbosperma nevadensis palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris palustris isimulata Dentata fragilis livensis intermedia	Mrs Hughes Rotundatum	Soft Sheid Fern created Soft Sheid Fern SpidefBrack ChineseBrack Tongue In, Jep felt fern Krauss's spikemoss WindedBeech-JapanesBer BroadBeech-Een, Southern DecidSouthShieldten, Rive Lemon-scentedIm.Sweidly Nevadamarshfern, Nevadal Nevadamarshfern, Teveningtm Marsh fern marsh fern Marsokusettsfern, Bogfern DownyMaiden, BlueSternfr Rusty Woodsia	3 5 4 9 1 7 20 20 20 20 20 20 20 20 20 20 20 20 20	6 6 6 4 4 7 4 4 4 2 4 4 2 4 6 5 2 5	40 40 20 10 1/2 24 20 36 40 25 18 30 18 30 24 20 14 6 6 6	TN NTREA DUZGJ KGW ENT SZNEC GNRET ZRUN TWEK ZTINEG WZGS WZGS SNZOK WZT AHTKN TK ERTNZ	Va SuffkEng IavaBeds Wa Georg.Cauc	Europe Europe JapCh E&SE Asie E&SE Asie EurS&Easia E NAm SE US Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm Eur,NAm	94/45 95/141 94/ 95/9 93/0 95/9 93/0 95/9 93/0 95/141 94/ 95/141 94/ 95/141 94/ 93/9,126 95/9 12 92/ 94/9 92/2 92/2 94/1265 93/ 95/141 92/ 94/1265 93/ 95/12 94/2 45 93
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