

ANNOTATED LIST OF THE FERNS AND FERN ALLIES OF ARKANSAS¹

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Records of ferns and fern allies in Arkansas date back to the travels and collections of Nuttall (1821, 1835). In 1835, Nuttall reported 23 species of pteridophytes from the Arkansas Territory. Lesquereux (1860) recorded 35 species for the state as part of a geological survey. Harvey (1881) compiled an annotated list of Arkansas ferns with notes on the ranges and habitats of 40 taxa. In a list of Arkansas plants, Branner and Coville (1891) included 45 species of ferns and fern allies.

Buchholz (1924) made deletions from and additions to the lists of Harvey and Branner and Coville to arrive at 46 species and 3 varieties of pteridophytes for Arkansas. Buchholz's study was immediately followed by Palmer's (1924) report of two new species for the state. These additions were incorporated in a supplement of the Arkansas plants by Buchholz and Palmer (1926) which lists 15 pteridophytes. Scully (1937, 1939) produced two papers describing the ferns and fern allies found in and around Hot Springs National Park.

The most recent account of the Arkansas pteridophytes was written by Moore (1940). It includes an annotated list of 67 species and lesser taxa. Moore (1941) also published a paper entitled "Some Noteworthy Fern Communities of Arkansas" which contains lists of species found in five different localities within the Interior Highlands. The latest, statewide, compilatory list available on all Arkansas vascular plants is by Smith (1978). This work includes distribution maps for 70 ferns and fern allies.

Since the early 1940's, thousands of voucher specimens have been added to herbaria and taxonomic research has resulted in a number of nomenclatural changes. Over a dozen additional taxa have been discovered in the state including those reported by Chandler (1941), Moore (1947, 1950, 1951), Wagner (1962), Bowers and Redfearn (1967), Farrar and Redfearn (1968), Tucker (1971), Thomas (1976), and Buck (1977). These additions and changes make it desirable to provide an up-to-date account of the Arkansas pteridophytes.

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TABLE 1. List of Herbaria Examined²

(APCR)	Arkansas Polytechnic College Russellville, Arkansas
(ARKSU)	Arkansas State University Jonesboro, Arkansas
(F)	Field Museum of Natural History Chicago, Illinois
(HXC)	Hendrix College Conway, Arkansas
(MO)	Missouri Botanical Garden St. Louis, Missouri
(MEM)	Memphis State University Memphis, Tennessee
(NLU)	Northeast Louisiana University Monroe, Louisiana
(NY)	New York Botanical Garden Bronx, New York
(PH)	Academy of Natural Sciences Philadelphia, Pennsylvania
(SIU)	Southern Illinois University Carbondale, Illinois
(SMS)	Southwest Missouri State University Springfield, Missouri
(SMU)	Southern Methodist University Dallas, Texas
(UARK)	University of Arkansas Fayetteville, Arkansas
(UCA)	University of Central Arkansas Conway, Arkansas
(US)	Smithsonian Institution Washington, D.C.

²Abbreviations mostly after Holmgren and Keuken (1974).



The sequence of families and genera listed in this paper follows Crabbe, Jermy, and Mickel (1975). Lesser taxa are arranged alphabetically under the genus. Synonyms that have been applied to Arkansas material are given in brackets. Data gathered from personal collections and specimens contained in the herbaria listed in Table I were used to develop habitat descriptions and distribution maps for the various taxa.

Arkansas can be divided into several physiographic regions based on differences in topography, geology, soil associations, and forest types (Foti, 1974). In Figure 1, the Interior Highlands are divided into the Ozark Highlands, the Boston Mountains, the Arkansas River Valley, and the Ouachita Mountains, while the Gulf Coastal Plain Lowlands are divided into the West Gulf Coastal Plain, the Mississippi Alluvial Plain, and Crowley's Ridge. Many species of Arkansas pteridophytes show distribution patterns which correspond to these physiographic regions. These regions are mentioned when they are useful in characterizing distribution patterns.

A representative specimen is cited for each county in which the species, hybrid, or infraspecific taxon has been collected (see Figure 2 for map of Arkansas counties). Dot maps, which depict the cited specimens, are included near the end of this paper.

Remarks on some doubtful and excluded taxa follow the annotated list.

ANNOTATED LIST OF ARKANSAS PTERIDOPHYTA

LYCOPODIACEAE

1. ***Lycopodium appressum*** (Chapm.) Lloyd & Underw., Bull. Torrey Bot. Club 27: 153. 1900. [*Lycopodium inundatum* var. *bigelovii* Tuckerm.; *Lycopodium inundatum* var. *appressum* Chapm.]

Moist to wet, sandy, disturbed soil along streams and railroad tracks, at edges of lakes, in open pine woods, waste ground, and sandy bogs; West Gulf Coastal Plain.

Clark Co.: Taylor 2172 (SIU). Hempstead Co.: D. Moore 490062 (UARK). Ouachita Co.: Taylor 2627 (SIU). Saline Co.: Young 1513 (UCA). Union Co.: D. Moore 6264 (APCR).

2. ***Lycopodium lucidulum*** Michx., Fl. Bor. Am. 2: 284. 1803.

North-facing, shaded, sandstone outcrops in the Boston Mountains.

Franklin Co.: lower talus slope; Spy Rock Hollow; sect. 20, T12N, R26W; *Redfearn 21148* (SMS). Madison Co.: tributaries to Mulberry Creek; sect. 1–12, T13N, R24–25W; *Redfearn 18553* (SMS). Newton Co.: narrow ravine along upper reaches of Terrapin Branch; sect. 26, T14N, R23W; *Redfearn & Weber 27493* (SMS).

SELAGINELLACEAE

3. ***Selaginella apoda*** (L.) Spring (as “apus”) in Mart., Fl. Bras. 1(2): 119. 1840. [*Lycopodium apodum* L.; *Diplostachyum apodum* (L.) Beauv.; *Selaginella apoda* (L.) Fern.]

Moist to wet, usually shaded, sandstone and shale outcrops, low meadows, seepage areas, and sandy or clayey soils along stream banks.

Ashley Co.: *Taylor 1874* (SIU). Clark Co.: *Redfearn 24404* (SMS). Cleburne Co.: *Babb 1023* (ARKSU). Drew Co.: *Demaree 17899* (MO). Faulkner Co.: *Taylor 2008* (SIU). Garland Co.: *Taylor 2557* (SIU). Greene Co.: *D. Moore 480681* (UARK). Hempstead Co.: *D. Moore 56128* (UARK). Hot Spring Co.: *Taylor 936* (SIU). Howard Co.: *Ilitis 680* (UARK). Little River Co.: *D. Moore 50021* (UARK). Logan Co.: *Taylor 1044* (SIU). Montgomery Co.: *D. Moore 430154* (UARK). Perry Co.: *Issacs 3319* (UCA). Polk Co.: *J. Moore 3145* (UCA). Pope Co.: *D. Moore 520759* (UARK). Randolph Co.: *Taylor 2665* (SIU). Sevier Co.: *D. Moore 510094* (UARK). Union Co.: *Taylor 2631* (SIU). Van Buren Co.: *Johnson 292* (HXC). Washington Co.: *French 269* (UARK).

4. ***Selaginella eclipes*** Buck, Can. J. Bot. 55: 366. 1977.

Moist to wet, usually shaded, calcareous rock outcrops; Ozark Highlands and Boston Mountains.

Benton Co.: *D. Moore 321202* (UARK). Crawford Co.: *Taylor 1096* (SIU). Franklin Co.: *Redfearn 23699* (SMS). Fulton Co.: *Redfearn 26438* (SMS). Iazard Co.: *Taylor 1268* (SIU). Madison Co.: *Redfearn 18857* (SMS). Marion Co.: *D. Moore 350165* (UARK). Newton Co.: *Taylor 2690* (SIU). Searcy Co.: *Redfearn 14273* (SMS). Stone Co.: *D. Moore 450810* (UARK). Washington Co.: *Callicott s.n.* (UARK).

5. ***Selaginella riddellii*** Van Eselt., Contr. U.S. Nat. Herb. 20: 162. 1918. [*Selaginella arenicola* subsp. *riddellii* (Van Eselt.) Tryon]

Sandy, open soil.

Nevada Co.: roadside along Hwy. 24; ca. 0.3 mi. E of Bluff City; *Taylor 2747* (SIU). Ouachita Co.: hillside; ca. 0.5 mi. N of Chidester Baptist Church, Chidester and dumping ground along Hwy. 368; ca. 1.7 mi. W of jct. Hwys. 24 & 368; *Taylor 2743* (SIU). Pike Co.: outcrops along Little Missouri River; NW¼ sect. 6, T5S, R27W; *Roberts & Bradford s.n.* (UARK). Pope Co.: sandstone bluffs above Arkansas River; Norristown Mountain, Russellville; *Tucker 6563* (SMU).

6. ***Selaginella rupestris*** (L.) Spring, Flora 21: 149, 182. 1838. [*Lycopodium rupestre* L.]

Exposed, sandstone outcrops.

Baxter Co.: *Tucker 6809* (APCR). Benton Co.: *D. Moore 350203* (MO). Carroll Co.: *Haas 1516* (UCA). Cleburne Co.: *Babb 1580* (ARKSU). Conway Co.: *J. Moore 1097*

(UARK). Independence Co.: *Demaree* 59791 (SMU). IZARD Co.: *Demaree* 32518 (MO). Marion Co.: *Redfearn* 08163 (SMS). Newton Co.: *D. Moore* 32490 (UARK). Pope Co.: *Redfearn* 26772 (SMS). Searcy Co.: *D. Moore* 350160 (MO).

ISOETACEAE

7. ***Isoetes butleri*** Engelm., Bot. Gaz. 3: 1. 1878.

Seasonally moist to wet calcareous soil pockets on limestone glades and dolomite, calcareous shale, or chalk outcrops.

Carroll Co.: *Bush* 1350 (MO). Little River Co.: *D. Moore* 50040 (UARK). Madison Co.: *Haas* 1519 (UCA). Newton Co.: *Taylor* 1228 (SIU). Polk Co.: *J. Moore* 3147 (UCA). Pulaski Co.: *Harper* 17 (PH). Sebastian Co.: *D. Moore* 490016 (UARK). Sharp Co.: *Hartsoe* 333 (SMU). Stone Co.: *D. Moore* 470698 (UARK). Washington Co.: *D. Moore* 53186 (UARK). Yell Co.: *Buchholz* s.n. (UARK).

8. ***Isoetes melanopoda*** Gay & Dur., Bull. Soc. Bot. Fr. 11: 102. 1864.

Seasonally moist to wet woods, meadows, fields, margins of ponds, roadside ditches, and thin soil depressions on sandstone, shale, or igneous rock outcrops.

Arkansas Co.: *D. Moore* 510225 (UARK). Baxter Co.: *J. Moore* 5677 (UCA). Benton Co.: *D. Moore* 400259 (UARK). Cleburne Co.: *Taylor* 1011 (SIU). Conway Co.: *Demaree* 23119 (MO). Faulkner Co.: *Taylor* 2006 (SIU). Fulton Co.: *D. Moore* 330226 (UARK). Garland Co.: *Palmer* 24921 (UARK). Grant Co.: *Locke* 2513 (UARK). Independence Co.: *D. Moore* 450503 (APCR). IZARD Co.: *Taylor* 2117 (SIU). Johnson Co.: *D. Moore* 380015 (UARK). Logan Co.: *Taylor* 1043 (SIU). Madison Co.: *D. Moore* 32320 (UARK). Marion Co.: *D. Moore* 390302 (UARK). Newton Co.: *D. Moore* 350181 (UARK). Polk Co.: *J. Moore* 3147 (UCA). Pope Co.: *Taylor* 2703 (SIU). Pulaski Co.: *Demaree* 18801 (MO). Saline Co.: *D. Moore* 480157 (UARK). Van Buren Co.: *Johnson* 296 (HXC). Washington Co.: *Palmer* 24755 (MO).

The pale-based form, *Isoetes melanopoda* f. *pallida* (Engelm.) Clute, is often found growing with the typical black-based form.

EQUISETACEAE

9. ***Equisetum arvense*** L., Sp. Pl. 2: 1601. 1753.

Sandy or gravelly stream banks and roadsides.

Benton Co.: *D. Moore* s.n. (UARK). Fulton Co.: *Demaree* 26821 (SMU). Newton Co.: *Smith* 3180 (UARK). St. Francis Co.: *Demaree* 22154 (NY). Stone Co.: *D. Moore* 450615 (UARK). Washington Co.: *D. Moore* 490105 (UARK).

10. ***Equisetum* × *ferrissii*** Clute, Fern Bull. 12: 22. 1904. [*Equisetum laevigatum* var. *elatum* Engelm.; *Equisetum hiemale* var. *intermedium* A. A. Eat.; *Equisetum laevigatum* auct. non A. Br.: Schaffner; *Equisetum hyemale* var. *affine* × *E. laevigatum* Hauke]

Moist, sandy or calcareous soils along stream banks, railroad tracks, and roadsides.

Baxter Co.: *D. Moore 450742* (UARK). Benton Co.: *D. Moore 400255* (UARK). Fulton Co.: *D. Moore 330167* (UARK). Independence Co.: *Thomas 9056* (NLU). Izard Co.: *Taylor 1272* (SIU). Jefferson Co.: *Locke 978* (UARK). Marion Co.: *D. Moore 480731* (UARK). Newton Co.: *D. Moore 650* (UARK). Phillips Co.: *Demaree 15219* (SMU). Pulaski Co.: *Merrill 513* (UARK). Stone Co.: *D. Moore 451190* (UARK).

11. ***Equisetum hyemale* L. var. *affine* (Engelm.) A. A. Eat.**, Fern Bull. 11: 111. 1903. [*Equisetum praealtum* Raf.; *Equisetum robustum* A. Br. ex Engelm; *Equisetum hiemale* var. *robustum* (A. Br.) A. A. Eat.; *Equisetum hyemale* var. *elatum* (Engelm.) Morton; *Equisetum hyemale* var. *pseudohyemale* (Farw.) Morton]

Sandy or gravelly stream banks, roadside ditches, fence rows, edges of lakes, or generally disturbed, moist soil.

Arkansas Co.: *D. Moore 480644* (UARK). Baxter Co.: *Demaree 23551* (SMU). Benton Co.: *Demaree 4631* (UARK). Carroll Co.: *Leonard 59* (UARK). Craighead Co.: *Demaree 30294* (PH). Cross Co.: *Demaree 3759* (UARK). Drew Co.: *D. Moore s.n.* (UARK). Faulkner Co.: *Haas 1503* (UCA). Fulton Co.: *D. Moore 470255* (UARK). Garland Co.: *Taylor 2559* (SIU). Hempstead Co.: *Buchholz 438* (UARK). Lafayette Co.: *Loche s.n.* (UARK). Lawrence Co.: *Carter 352* (UARK). Lee Co.: *Taylor 1188* (SIU). Marion Co.: *D. Moore 480731* (UARK). Mississippi Co.: *Bowers s.n.* (MEM). Montgomery Co.: *Taylor 2610* (SIU). Newton Co.: *D. Moore 32463* (UARK). Perry Co.: *Johnson 62* (HXC). Phillips Co.: *Taylor 1190* (SIU). Polk Co.: *McWilliam s.n.* (UARK). Pope Co.: *Tucker s.n.* (APCR). Pulaski Co.: *Demaree 8567* (NY). Randolph Co.: *Riggs s.n.* (UARK). St. Francis Co.: *Demaree 7230* (UARK). Searcy Co.: *Clark 104* (HXC). Sharp Co.: *Demaree 26448* (SMU). Stone Co.: *Taylor 2900* (SIU). Washington Co.: *D. Moore 450851* (UARK).

OPHIOGLOSSACEAE

12. ***Botrychium biternatum* (Sav.) Underw.**, Bot. Gaz. 22: 407. 1896. [*Osmunda biternata* Sav.; *Botrychium tenuifolium* Underw.; *Botrychium obliquum tenuifolium* (Underw.) Gilbert; *Botrychium dissectum* var. *tenuifolium* (Underw.) Farw.]

Moist to dry, open woods, thickets, and low wet areas.

Cleburne Co.: *Johnson 398* (HXC). Cleveland Co.: *Miller 764* (UARK). Columbia Co.: *D. Moore 420478* (UARK). Conway Co.: *J. Moore 1233* (UARK). Craighead Co.: *Watkins s.n.* (UARK). Cross Co.: *Lowman 260* (HXC). Drew Co.: *Palmer 44224* (MO). Faulkner Co.: *Johnson 470* (HXC). Franklin Co.: *Barber 420* (UARK). Garland Co.: *Taylor 2862* (SIU). Grant Co.: *Demaree 87193* (SMU). Hempstead Co.: *Palmer 8980* (MO). Hot Spring Co.: *D. Moore 400085* (UARK). Independence Co.: *Thomas 34313* (NLU). Jefferson Co.: *Locke 1216A* (UARK). Lincoln Co.: *Thomas 34392* (NLU). Little River Co.: *D. Moore 5621* (UARK). Logan Co.: *Pyle 557* (UARK). Lonoke Co.: *Clark 673* (HXC). Montgomery Co.: *Taylor 2219* (SIU). Newton Co.: *Johnson 463* (HXC).

Perry Co.: *Johnson 133* (HXC). Polk Co.: *Taylor 2548* (SIU). Pope Co.: *Johnson 289* (HXC). Pulaski Co.: *Merrill 1217* (UARK). Saline Co.: *D. Moore 50171* (UARK). Sevier Co.: *D. Moore 401102* (UARK). Union Co.: *Taylor 2640* (SIU). Van Buren Co.: *Johnson 100* (HXC). Washington Co.: *Hartsoe 370* (SMU). White Co.: *Thomas 34166* (NLU). Yell Co.: *Demaree 67357* (SIU).

13. **Botrychium dissectum** Spreng., *Anleit. Gewachse* 3: 172. 1804. Two varieties are recognized in the state.

13a. **Botrychium dissectum** Spreng. var. **dissectum** [*Botrychium lunarioides* var. *dissectum* Gray; *Botrychium obliquum* var. *dissectum* (Spreng.) Prantl; *Botrychium dissectum* var. *typicum* Clausen]

Newton Co.: mesic ravine in Lost Valley State Park; *Thompson 907* (SMS). Washington Co.: low, open woods near Farmington; *D. Moore 300309* (MO).

13b. **Botrychium dissectum** Spreng. var. **obliquum** (Muhl.) Clute, *Fern Bull.* 10: 76. 1902. [*Botrychium obliquum* Muhl.; *Botrychium lunarioides* var. *obliquum* (Muhl.) Gray; *Botrychium ternatum* var. *obliquum* (Muhl.) D. C. Eat.]

Rich, moist, open woodlands and thickets.

Faulkner Co.: *Taylor 2606* (SIU). Howard Co.: *Kellogg s.n.* (MO). Montgomery Co.: *J. Moore & McWilliam s.n.* (UARK). Newton Co.: *D. Moore 350391* (UARK). Polk Co.: *D. Moore 510021* (UARK). Van Buren Co.: *Demaree 4755* (UARK). Washington Co.: *D. Moore 330309* (UARK).

14. **Botrychium lunarioides** (Michx.) Sw., *Syn. Fil.*, 172. 1806. [*Botrychium lunarioides* Michx.; *Botrychium fumarioides* Willd.; *Botrychium ternatum* var. *lunarioides* D. C. Eat.]

Cemeteries and church yards in the West Gulf Coastal Plain.

Howard Co.: County Line Missionary Baptist Church Cemetery; off Hwy. 24, ca. 5 mi. W of Nashville; *Thomas 28147* (NLU). Lafayette Co.: Forest Grove Baptist Church Cemetery; off Hwy. 53, ca. 1 mi N of Walker Creek; *Thomas 34005* (NLU). Sevier Co.: Coulter Memorial Garden; off Hwy. 71, Locksburg; *Thomas 28139* (NLU). Union Co.: Olive Branch Methodist Church Yard; off Hwy. 7, ca. 4.5 mi. SE of New Caledonia; *Taylor 2638* (SIU).

15. **Botrychium virginianum** (L.) Sw., *Journ. Bot. Schrad.* 1800 (2): 111. 1801. [*Osmunda virginiana* L.: *Osmundopteris virginiana* (L.) Small]

Moist to dry woodlands and thickets.

Ashley Co.: *Taylor 1875* (SIU). Baxter Co.: *Taylor 2675* (SIU). Benton Co.: *Taylor 1124* (SIU). Boone Co.: *Demaree s.n.* (UARK). Carroll Co.: *Palmer 4443* (MO). Clark Co.: *Taylor 2178* (SIU). Clay Co.: *Hartsoe 374* (SMU). Cleburne Co.: *Babb 338* (ARKSU). Conway Co.: *J. Moore 1086* (UARK). Craighead Co.: *Richards 5332* (ARKSU). Crawford Co.: *Moore 710233* (UARK). Crittenden Co.: *Browne 62123* (MEM).

Dallas Co.: *Taylor 1133* (SIU). Faulkner Co.: *Haas 1496* (UCA). Franklin Co.: *D. Moore 300251* (UARK). Garland Co.: *Palmer 24553* (MO). Greene Co.: *Demaree 3932* (SMU). Hempstead Co.: *Bush 1364* (NY). Hot Spring Co.: *D. Moore 451096* (UARK). Howard Co.: *McSwain 43E77* (UARK). Independence Co.: *Demaree 26732* (SMU). Izard Co.: *Matthews 125* (ARKSU). Jefferson Co.: *Locke 2231* (UARK). Johnson Co.: *D. Moore 450257* (UARK). Lawrence Co.: *Taylor 2596* (SIU). Lee Co.: *Taylor 1183* (SIU). Logan Co.: *Haas 1495* (UCA). Lonoke Co.: *Clark 672* (HXC). Madison Co.: *D. Moore 460146* (UARK). Marion Co.: *Taylor 1234* (SIU). Montgomery Co.: *Taylor 2838* (SIU). Nevada Co.: *D. Moore 450105* (UARK). Newton Co.: *D. Moore 32504* (UARK). Phillips Co.: *Taylor 2829* (SIU). Pike Co.: *Lindley & Lindley s.n.* (UARK). Polk Co.: *Lodewyks 195* (MO). Pope Co.: *Taylor 1207* (SIU). Pulaski Co.: *Redfearn 25934* (SMS). Randolph Co.: *Taylor 2100* (SIU). St. Francis Co.: *Demaree 4349* (NY). Searcy Co.: *Taylor 1852* (SIU). Sharp Co.: *Demaree 27719* (SMU). Stone Co.: *Taylor 1262* (SIU). Union Co.: *D. Moore 68109* (UARK). Van Buren Co.: *Taylor 2566* (SIU). Washington Co.: *D. Moore 50008* (UARK). White Co.: *Johnson 456* (HXC).

16. *Ophioglossum crotalophoroides* Walt., Fl. Caroliniana, 256. 1788. [*Ophioglossum bulbosum* Michx.; *Ophioglossum pusillum* Nutt.; *Ophioglossum vulgatum* var. *crotalophoroides* (Walt.) D. C. Eat.]

Sandy, open soil in lawns, meadows, cemetery yards, pastures, and roadsides.

Ashley Co.: *Thomas 27300* (NLU). Bradley Co.: *Thomas 27912* (NLU). Calhoun Co.: *Lawson 256* (NLU). Clark Co.: *Lawson 74* (NLU). Cleveland Co.: *Thomas 43991* (NLU). Columbia Co.: *D. Moore 5771* (UARK). Dallas Co.: *Lawson 226* (NLU). Drew Co.: *Thomas 26904* (NLU). Faulkner Co.: *Taylor 2009* (SIU). Hempstead Co.: *D. Moore 53155* (UARK). Hot Spring Co.: *Thomas 34114* (NLU). Howard Co.: *D. Moore 5772* (UARK). Independence Co.: *Thomas 38584* (NLU). Jackson Co.: *Thomas 34217* (NLU). Jefferson Co.: *Thomas 34132* (NLU). Lafayette Co.: *Thomas 34006* (NLU). Lincoln Co.: *Thomas 34141* (NLU). Little River Co.: *Thomas 27954* (NLU). Miller Co.: *Thomas 34011* (NLU). Nevada Co.: *D. Moore 450039* (UARK). Newton Co.: *Thompson 1015* (SMS). Ouachita Co.: *Taylor 2625* (SIU). Polk Co.: *Thomas 34106* (NLU). Pulaski Co.: *Thomas 34377* (NLU). Randolph Co.: *Thomas 34239* (NLU). Sevier Co.: *Taylor 2641* (SIU). Union Co.: *Taylor 2629* (SIU). White Co.: *Thomas 34159* (NLU).

17. *Ophioglossum engelmannii* Prantl, Ber. Deutsch Bot. Ges. 1: 351. 1883. [*Ophioglossum vulgatum* f. *engelmannii* (Prantl) Clute; *Ophioglossum vulgatum* var. *engelmannii* (Prantl) Clute]

Seasonally moist to wet calcareous soils on limestone glades, in open woods, and on chalk outcrops.

Baxter Co.: *Palmer 14333* (MO). Benton Co.: *Palmer 17199* (MO). Boone Co.: *Demaree s.n.* (UARK). Carroll Co.: *D. Moore 350435* (MO). Faulkner Co.: *Taylor 2010* (SIU). Fulton Co.: *D. Moore 520391* (UARK). Garland Co.: *Haas 1492* (UCA). Hempstead Co.: *Palmer 5376* (MO). Independence Co.: *Thomas 8926* (NLU). Izard Co.: *Taylor 2107* (SIU). Little River Co.: *D. Moore 50036* (UARK). Madison Co.: *D. Moore 450406* (UARK). Marion Co.: *D. Moore 520332* (APCR). Pulaski Co.: *D.*

Moore 330069 (UARK). Randolph Co.: *Taylor 2086* (SIU). Sharp Co.: *D. Moore 520382* (UARK). Stone Co.: *Taylor 1259* (SIU). Washington Co.: *Palmer 23300* (MO).

18. ***Ophioglossum nudicaule*** L. f. var. ***tenerum*** (Mett. ex Prantl) Clausen, Mem. Torrey Bot. Club 19: 146. 1938. [*Ophioglossum tenerum* Mett. ex Prantl]

Cemeteries and church yards in the West Gulf Coastal Plain.

Ashley Co.: Carter Cemetery; off Hwy. 82, ca. 1 mi. W of jct. Hwys. 81 and 82 and Antioch Methodist Church Cemetery; off Hwy. 81, ca. 3 mi. S of jct. Hwys. 81 and 82; *Thomas 27903* (NLU). Hempstead Co.: Shover Springs Baptist Church Cemetery; off Hwy. 32, Shover Springs; *Thomas 27951* (NLU). Nevada Co.: White's Chapel Baptist Church Yard; ca. 3 mi. E of Hwy. 53 and Bodcaw; *Thomas 27947* (NLU). Union Co.: Harper Springs Cemetery; S of Hwy. 129 and Huttig; also Cemetery in pine woods along Hwy. 275, ca. 5 mi. S of Strong; *Taylor 2630* (SIU).

19. ***Ophioglossum petiolatum*** Hook., Exotic Flora 1: 56. 1823. [*Ophioglossum floridanum* E. P. St. John]

Cemeteries and yards; West Gulf Coastal Plain and Mississippi Alluvial Plain.

Dallas Co.: Oakland Cemetery, Fordyce; *Thomas 27918* (NLU). Jefferson Co.: yard beside bldg. at Pine Bluff Arsenal; sect. 20, T4S, R10W; *Thomas 44091* (NLU). Union Co.: Olive Branch Methodist Church Yard; ca. 0.5 mi. off Hwy. 7, ca. 4.5 mi. SE of New Caledonia; *Taylor 2637* (SIU). White Co.: Antioch Union Church Yard; off Hwy 31, Antioch; *Thomas 34184* (NLU).

20. ***Ophioglossum vulgatum*** L. var. ***pycnostichum*** Fern., Rhodora 41: 494. 1939.

Moist, open woods, alluvial woodlands, and swamps.

Arkansas Co.: *Kellogg s.n.* (MO). Ashley Co.: *Thomas 34123* (NLU). Clay Co.: *Hartsoe s.n.* (UARK). Craighead Co.: *Richards 6209* (ARKSU). Cross Co.: *Clark 683* (HXC). Drew Co.: *Thomas 34129* (NLU). Grant Co.: *D. Moore 50095* (UARK). Hempstead Co.: *Kellogg s.n.* (MO). Howard Co.: *D. Moore 5680* (UARK). Independence Co.: *Thomas 38606* (NLU). Izard Co.: *J. Moore 5680* (UCA). Jackson Co.: *Richards 6197* (ARKSU). Jefferson Co.: *Locke 1734* (UARK). Little River Co.: *D. Moore 5620* (UARK). Pike Co.: *Lindley and Lindley s.n.* (NLU). Poinsett Co.: *Kellogg s.n.* (MO). Polk Co.: *J. Moore 3140* (UCA). Pulaski Co.: *Lowman s.n.* (HXC). Union Co.: *Thomas 35321* (NLU).

OSMUNDACEAE

21. ***Osmunda cinnamomea*** L., Sp. Pl. 2: 1066. 1753.

Swamps, marshes, moist woods, seepage slopes, wet depressions, stream banks, edges of lakes, around springs, and on wet rock ledges.

Bradley Co.: *Locke 2026* (UARK). Benton Co.: *Demaree 4885* (UARK). Calhoun Co.: *Demaree 16908* (SMU). Clark Co.: *Taylor 2182* (SIU). Clay Co.: *Rosen 99* (HXC).

Cleburne Co.: *Babb 281* (ARKSU). Cleveland Co.: *Demaree 23309* (MO). Columbia Co.: *Taylor 1898* (SIU). Conway Co.: *D. Moore s.n.* (UARK). Crawford Co.: *D. Moore 710288* (UARK). Cross Co.: *D. Moore 420368* (UARK). Drew Co.: *Demaree 28816* (SMU). Faulkner Co.: *Johnson 490* (HXC). Franklin Co.: *Hartsoe s.n.* (UARK). Garland Co.: *Taylor 2560* (SIU). Grant Co.: *Taylor 2724* (SIU). Greene Co.: *Demaree 26659* (SMU). Hempstead Co.: *Bush 5724* (MO). Hot Spring Co.: *Palmer 8103* (MO). Howard Co.: *McSwain 43E126* (UARK). Independence Co.: *Johnson 301* (HXC). IZard Co.: *Demaree 24435* (SMU). Jefferson Co.: *Demaree 24054* (SMU). Lafayette Co.: *Fassett 20907* (F). Logan Co.: *D. Moore 480082* (UARK). Lonoke Co.: *Clark 666* (HXC). Madison Co.: *Davis 1499* (UARK). Montgomery Co.: *Taylor 2207* (SIU). Nevada Co.: *D. Moore 450091A* (UARK). Newton Co.: *Redfearn 27509* (SMS). Ouachita Co.: *D. Moore 4505* (UARK). Perry Co.: *Robertson s.n.* (APCR). Pike Co.: *Demaree 9543* (MO). Polk Co.: *D. Moore 480559* (UARK). Pope Co.: *D. Moore 350368* (UARK). Pulaski Co.: *Taylor 2541* (SIU). Saline Co.: *Haas 1489* (UCA). Sevier Co.: *D. Moore 400181* (UARK). Stone Co.: *D. Moore 450520* (UARK). Union Co.: *Taylor 1155* (SIU). Van Buren Co.: *Palmer 25175* (MO).

Osmunda cinnamomea f. *frondosa* (Torr. & Gray) Britton, which differs from the typical form in having sterile pinnae toward the base of the fertile frond, was collected by E. J. Palmer (MO 945740) from a sandy, open woods near Malvern, Hot Spring County.

22. ***Osmunda claytoniana*** L., Sp. Pl. 2: 1066. 1753.

Pope Co.: Alder thicket above a persistent spring, 0.9 mi. W. of Pelsor; *D. Moore 4191* (UARK). Stone Co.: around natural opening of Blanchard Springs Caverns; *Taylor 1251* (SIU).

23. ***Osmunda regalis*** L. var. ***spectabilis*** (Willd.) Gray, Man., 600. 1856. [*Osmunda spectabilis* Willd.]

Swamps, marshes, moist woods, seeps, wet depressions, stream banks, edges of lakes, and around springs.

Benton Co.: *Plank s.n.* (NY). Bradley Co.: *Locke 1091* (UARK). Calhoun Co.: *Demaree 22108* (MO). Clark Co.: *Taylor 2183* (SIU). Clay Co.: *Richards 5046* (ARKSU). Cleburne Co.: *Taylor 1025* (SIU). Cleveland Co.: *Taylor 1140* (SIU). Columbia Co.: *Taylor 1158* (SIU). Conway Co.: *J. Moore 928* (UARK). Craighead Co.: *Demaree 5056* (UCA). Crawford Co.: *D. Moore 710286* (UARK). Dallas Co.: *Taylor 2734* (SIU). Drew Co.: *Demaree 22417* (MO). Faulkner Co.: *D. Moore 55236* (UARK). Franklin Co.: *Barber s.n.* (UARK). Garland Co.: *Palmer 24949* (MO). Grant Co.: *Taylor 2726* (SIU). Greene Co.: *Demaree 4065* (SMU). Hempstead Co.: *Taylor 1178* (SIU). Hot Spring Co.: *Demaree 14784A* (SMU). Howard Co.: *McSwain 43E127* (UARK). Independence Co.: *Johnson 304* (HXC). Jefferson Co.: *Demaree 24300* (MO). Johnson Co.: *Redfearn 23839* (SMS). Lawrence Co.: *Wheeler 54* (F). Logan Co.: *D. Moore 480041* (UARK). Lonoke Co.: *Clark 667* (HXC). Montgomery Co.: *Taylor 2208* (SIU). Nevada Co.: *D. Moore 450091* (UARK). Newton Co.: *Johnson 465* (HXC). Ouachita Co.: *Demaree 16846* (MO). Pike Co.: *Demaree 9539* (MO). Poinsett Co.: *Pyle 588* (UARK). Polk Co.: *Palmer 12625* (MO). Pope Co.: *D. Moore 350369* (UARK). Pulaski Co.: *Taylor 2542* (SIU). Saline Co.: *Haas 1485* (UCA). Stone Co.: *Thomas 8355* (NLU). Union Co.: *Taylor*

1157 (SIU), Van Buren Co.: *D. Moore 350438* (UARK). Washington Co.: *Hite 29* (UARK). Yell Co.: *Buchholz 1088* (UARK).

Osmunda regalis var. *spectabilis* f. *anomala* (Farw.) Harris, which differs from typical plants in having sterile pinnules borne in the fertile segment of the frond, has been collected in Clay, Green, Polk and Washington Counties.

ADIANTACEAE

24. ***Cheilanthes alabamensis*** (Buckl.) Kunze, *Linnaea* 20: 4. 1847. [*Pteris alabamensis* Buckl.]

Limestone or dolomite outcrops; primarily Ozark Highlands.

Baxter Co.: *Taylor 2674* (SIU). Benton Co.: *Palmer 24739* (MO). Boone Co.: *Palmer 6905* (MO). Carroll Co.: *Leonard 115* (UARK). Garland Co.: *Engelmann s.n.* (MO). Independence Co.: *Thomas 7720* (NLU). Izard Co.: *Demaree 3264* (UARK). Newton Co.: *Taylor 1219* (SIU). Searcy Co.: *Taylor 2583* (SIU). Stone Co.: *D. Moore 470697* (UARK). Washington Co.: *Taylor 1111* (SIU).

25. ***Cheilanthes castanea*** Maxon, *Proc. Biol. Soc. Wash.* 32: 111. 1919.

Baxter Co.: rock outcrops; Norfolk; *D. Moore 451026* (UARK).

26. ***Cheilanthes feei*** Moore, *Ind. Fil.*, 38. 1857. [*Cheilanthes lanuginosa* Hook.]

Limestone, dolomite, or calcareous sandstone outcrops; primarily Ozark Highlands.

Baxter Co.: *Taylor 2681* (SIU). Benton Co.: *Demaree 4975* (UARK). Boone Co.: *Palmer 6906* (MO). Carroll Co.: *Trelease 4/20799* (MO). Garland Co.: *Letterman s.n.* (MO). Izard Co.: *Demaree 17038* (MO). Marion Co.: *D. Moore 410522* (UARK). Newton Co.: *D. Moore 350103* (UARK). Searcy Co.: *D. Moore 350150* (UARK). Stone Co.: *Tucker 6904* (APCR). Washington Co.: *Demaree s.n.* (SMU).

27. ***Cheilanthes lanosa*** (Michx.) D. C. Eat. in Torr., *Rep. U. S. and Mex. Bound. Surv.* 2: 234. 1859. [*Nephrodium lanosum* Michx.; *Adiantum vestitum* Spreng.; *Cheilanthes vestita* (Spreng.) Sw.]

Sandstone, shale, dolomite, chert, novaculite, and occasionally limestone outcrops; chiefly Interior Highlands.

Baxter Co.: *Taylor 1844* (SIU). Benton Co.: *Taylor 1118* (SIU). Carroll Co.: *Palmer 4454* (MO). Clark Co.: *Taylor 2189* (SIU). Cleburne Co.: *Taylor 1023* (SIU). Conway Co.: *Tucker 3509* (APCR). Crawford Co.: *D. Moore 710221* (UARK). Faulkner Co.: *Taylor 2607* (SIU). Franklin Co.: *Taylor 1127* (SIU). Fulton Co.: *Palmer 29131* (MO). Garland Co.: *Taylor 2227* (SIU). Greene Co.: *Richards 5489* (ARKSU). Howard Co.: *Kellogg s.n.* (MO). Independence Co.: *Thomas 16443* (NLU). Izard Co.: *Palmer 35550* (MO). Johnson Co.: *Taylor 1091* (SIU). Lawrence Co.: *Taylor 2594* (SIU). Logan Co.:

Palmer 24191 (UARK). Madison Co.: *Redfearn 26788* (SMS). Marion Co.: *Johnson 91* (HXC). Montgomery Co.: *D. Moore 32975* (UARK). Perry Co.: *Owens s.n.* (US). Polk Co.: *J. Moore 3148* (UCA). Pope Co.: *Snider 23* (APCR). Pulaski Co.: *Buchholz 576* (UARK). Saline Co.: *Demaree 23017* (MO). Scott Co.: *D. Moore 430135* (UARK). Searcy Co.: *Taylor 1238* (SIU). Sebastian Co.: *Taylor 2718* (SIU). Stone Co.: *Taylor 2125* (SIU). Van Buren Co.: *Johnson 102* (HXC). Washington Co.: *Taylor 1113* (SIU). White Co.: *Demaree 26934* (SMU). Yell Co.: *Taylor 1198* (SIU).

28. ***Cheilanthes tomentosa*** Link, Hort. Berol. 2: 42. [*Cheilanthes lanosa* sensu Fern., Gray's Man. Bot., ed. 8: 47. 1950, non Eaton (1859)]

Sandstone, shale, dolomite, limestone, chert, and novaculite outcrops; Interior Highlands.

Baxter Co.: *D. Moore 451021* (UARK). Benton Co.: *Demaree 2911* (SMU). Boone Co.: *D. Moore 490379* (UARK). Cleburne Co.: *Taylor 1026* (SIU). Conway Co.: *D. Moore 480368* (UARK). Crawford Co.: *Palmer 26423* (UARK). Faulkner Co.: *Taylor 2601* (SIU). Franklin Co.: *Palmer 8140* (MO). Garland Co.: *Harvey 83* (MO). Hot Spring Co.: *Demaree 16534* (SMU). Howard Co.: *Kellogg s.n.* (MO). Izard Co.: *Demaree 3285* (SMU). Logan Co.: *Palmer 23207* (UARK). Marion Co.: *Johnson 98* (HXC). Montgomery Co.: *Demaree 34158* (SMU). Newton Co.: *D. Moore 32488* (UARK). Perry Co.: *Redfearn 24134* (SMU). Pike Co.: *Roberts 27* (UARK). Polk Co.: *J. Moore 3139* (UCA). Pope Co.: *D. Moore 520746* (UARK). Pulaski Co.: *Palmer 22990* (UARK). Scott Co.: *D. Moore 430134* (UARK). Searcy Co.: *D. Moore 350152* (UARK). Sebastian Co.: *Taylor 2716* (SIU). Stone Co.: *D. Moore 470747* (UARK). Washington Co.: *Taylor 1114* (SIU). Yell Co.: *Taylor 4369* (SIU).

29. ***Notholaena dealbata*** (Pursh) Kunze, Am. Journ. Sci. II. 6: 82. 1848. [*Cheilanthes dealbata* Pursh; *Pellaea dealbata* (Pursh) Prantl]

Limestone and dolomite outcrops; Ozark Highlands.

Baxter Co.: *Palmer 5951* (MO). Benton Co.: *Palmer 3790* (MO). Carroll Co.: *Palmer 4538* (MO). Madison Co.: *Nelson 10861* (MO). Washington Co.: *Taylor 1109* (SIU).

30. ***Pellaea atropurpurea*** (L.) Link, Fil. Sp. Hort. Berol., 59. 1841. [*Pteris atropurpurea* L.; *Allosorus atropurpureus* (L.) Presl]

Limestone, dolomite, or calcareous sandstone outcrops; most common in the Ozark Highlands.

Baxter Co.: *Taylor 1842* (SIU). Benton Co.: *Demaree 2908* (SMU). Boone Co.: *Palmer 6904* (MO). Carroll Co.: *Palmer 4424* (MO). Cleburne Co.: *Taylor 1020* (SIU). Conway Co.: *J. Moore 1262* (UARK). Franklin Co.: *Barber 448* (UARK). Fulton Co.: *Demaree 5370* (UARK). Garland Co.: *Taylor 2225* (SIU). Hot Spring Co.: *Demaree 15567* (SMU). Independence Co.: *Trelease s.n.* (MO). Izard Co.: *Taylor 1270* (SIU). Lawrence Co.: *Taylor 1789* (SIU). Madison Co.: *Taylor 1995* (SIU). Marion Co.: *Taylor 1231* (SIU). Newton Co.: *Taylor 1217* (SIU). Polk Co.: *J. Moore s.n.* (UARK). Pope Co.: *D. Moore 52074* (UARK). Randolph Co.: *Taylor 1802* (SIU). Searcy Co.: *Taylor 1242* (SIU). Sebastian Co.: *Taylor 2719* (SIU). Sharp Co.: *Taylor 1809* (SIU). Stone Co.: *Taylor 1247* (SIU). Van Buren Co.: *Palmer 25171* (UARK). Washington Co.: *Taylor 1112* (SIU).

An aberrant form of *P. atropurpurea* in which the pinnae or ultimate segments repeatedly fork was collected by D. M. Moore near West Fork, Washington County. Moore's specimens (MO 1860929, UARK 340687) are referable to *Pellaea atropurpurea* f. *cristata* (Trel.) Clute.

31. ***Pellaea glabella*** Mett. ex Kuhn, *Linnaea* 36: 87. 1869. [*Pellaea atropurpurea* var. *bushii* Mack. & Bush; *Pellaea atropurpurea* f. *glabella* (Mett. ex Kuhn) Clute]

Limestone, dolomite, or calcareous sandstone outcrops; chiefly in the Ozark Highlands.

Baxter Co.: *Taylor 1841* (SIU). Benton Co.: *D. Moore 4000284* (UARK). Carroll Co.: *D. Moore 410184* (UARK). Faulkner Co.: *Lane 241* (UARK). Garland Co.: *Engelmann s.n.* (MO). IZARD Co.: *Taylor 1271* (SIU). Marion Co.: *Demaree s.n.* (SMU). Newton Co.: *Taylor 2697* (SIU). Sharp Co.: *Johnson 485* (HXC). Stone Co.: *Taylor 2898* (SIU).

32. ***Adiantum capillus-veneris*** L., *Sp. Pl.* 2: 1096. 1753. [*Adiantum modestum* Underw.; *Adiantum tricholepis* f. *glabrum* Clute]

Moist to wet calcareous rock outcrops; principally Ozark Highlands and Boston Mountains.

Benton Co.: *Palmer 2940* (MO). Carroll Co.: *D. Moore 410188a* (UARK). Crawford Co.: *Moore 710274* (UARK). Franklin Co.: *Barber 2011* (UARK). Garland Co.: *Engelmann 19* (MO). Hot Spring Co.: *Demaree 19856* (MO). IZARD Co.: *Taylor 1269* (SIU). Logan Co.: *D. Moore 480076* (UARK). Madison Co.: *Nelson 10873* (MO). Marion Co.: *Palmer 5985* (MO). Newton Co.: *Taylor 1218* (SIU). Pope Co.: *D. Moore 520755* (UARK). Searcy Co.: *Taylor 1239* (SIU). Stone Co.: *Taylor 1250* (SIU). Van Buren Co.: *Palmer 24203* (UARK). Washington Co.: *Palmer 23906* (MO).

33. ***Adiantum pedatum*** L., *Sp. Pl.* 2: 1095. 1753.

Moist, shaded, rich woods, primarily Interior Highlands and Crowley's Ridge.

Baxter Co.: *Taylor 2682* (SIU). Benton Co.: *Demaree 4592* (SMU). Boone Co.: *Demaree s.n.* (UARK). Carroll Co.: *Palmer 4547* (MO). Clay Co.: *Richards 4402* (ARKSU). Cleburne Co.: *Demaree 30509* (SMU). Conway Co.: *Demaree 22793* (SMU). Craighead Co.: *Alliston 15* (ARKSU). Crawford Co.: *Taylor 1093* (SIU). Crittenden Co.: *Demaree 61080* (SMU). Cross Co.: *Lowman 344* (HXC). Faulkner Co.: *Demaree s.n.* (MO). Franklin Co.: *Johnson 527* (HXC). Fulton Co.: *Demaree 5372* (NY). Garland Co.: *Trelease s.n.* (MO). Hot Spring Co.: *Palmer 26589* (UARK). Independence Co.: *Demaree 17097* (MO). IZARD Co.: *Matthews 91* (ARKSU). Johnson Co.: *D. Moore 450265* (UARK). Lee Co.: *Taylor 1186* (SIU). Logan Co.: *Palmer 24158* (MO). Madison Co.: *Key 265* (SMS). Marion Co.: *Palmer 4777* (MO). Montgomery Co.: *Taylor 2215* (SIU). Newton Co.: *Taylor 1221* (SIU). Perry Co.: *Demaree 35477* (SMU). Phillips Co.: *Demaree 19221* (SMU). Polk Co.: *Taylor 1067* (SIU). Pope Co.: *Taylor 1202* (SIU). Pulaski Co.: *Johnson 122* (HXC). St. Francis Co.: *Demaree 21539* (MO). Saline Co.: *Demaree 23987* (SMU). Searcy Co.: *Taylor 2572* (SIU). Sevier Co.: *D. Moore 410371*

(UARK). Stone Co.: *Taylor 1253b* (SIU). Van Buren Co.: *Taylor 2565* (SIU). Washington Co.: *Taylor 1102* (SIU). White Co.: *Johnson 457* (HXC). Yell Co.: *Buchholz 1077* (NY).

34. ***Pteris multifida*** Poir. ex Lam., *Encyc. Bot.* 5: 714. 1804. [*Pycnodoria multifida* (Poir. ex Lam.) Small]

Garland Co.: Northwest facing limestone tufa at the base of Hot Springs Mountain, Hot Springs National Park; *Taylor 2708* (SIU).

HYMENOPHYLLACEAE

35. ***Trichomanes boschianum*** Sturm ex Bosch, *Nederl. Kruidk. Arch.* 5(2): 160. 1861.

Under moist, overhanging sandstone outcrops.

Cleburne Co.: ca. 1.5 mi. NE of Greers Ferry Dam; sect. 5, T10N, R9W; *Taylor 1013* (SIU). Madison Co.: 6.5 mi. SE of Pettigrew; sect. 1, T13N, R25W; *Clark 1400* (MO).

36. ***Trichomanes petersii*** Gray, *Am. Jour. Sci.* II. 15: 326. 1853.

Pope Co.: side of sandstone boulder in narrow drainage ravine running to Indian Creek; ca. 3 mi. SW of Pelsor, sect. 16, T12N, R20W; *Redfearn 21508* (SMS). Stone Co.: calcareous sandstone ledge along North Sylamore Creek; sect. 25, T169, R12W; *Taylor 2897* (SIU).

POLYPODIACEAE

37. ***Polypodium polypodioides*** (L.) Watt var. ***michauxianum*** Weatherby, *Contr. Gray Herb.* 124: 31. 1939. [*Acrostichum polypodioides* L.; *Polypodium incanum* sensu auct., non Sw. (1788); *Polypodium ceteraccinum* Michx; *Marginaria polypodioides* (L.) Tidest.]

On rocks or as an epiphyte on trees, especially oaks and elms.

Arkansas Co.: *Taylor 1867a* (SIU). Ashley Co.: *Taylor 1873b* (SIU). Baxter Co.: *Taylor 1848* (SIU). Bradley Co.: *Taylor 1145* (SIU). Calhoun Co.: *Johnson s.n.* (HXC). Carroll Co.: *Palmer 4528* (MO). Clark Co.: *Taylor 2179* (SIU). Clay Co.: *Hartsoe 376* (SMU). Cleburne Co.: *Taylor 1024* (SIU). Cleveland Co.: *Taylor s.n.* (SIU). Columbia Co.: *Taylor 1165* (SIU). Conway Co.: *Demaree 24962* (SMU). Craighead Co.: *Taylor 2882* (SIU). Crawford Co.: *Redfearn 24556* (SMS). Cross Co.: *Palmer 31658* (MO). Dallas Co.: *Taylor 2731* (SIU). Desha Co.: *Johnson s.n.* (UARK). Drew Co.: *Taylor 1149* (SIU). Faulkner Co.: *Taylor 2013* (SIU). Franklin Co.: *J. Moore s.n.* (APCR). Fulton Co.: *Demaree 5284* (UARK). Garland Co.: *Taylor 2196* (SIU). Grant Co.: *Taylor 2728* (SIU). Hempstead Co.: *Taylor 1179* (SIU). Hot Spring Co.: *Demaree 21194* (SMU). Howard Co.: *McSwain 43E66* (UARK). Independence Co.: *Demaree 17098* (SMU). Izard Co.: *Taylor 2138* (SIU). Jefferson Co.: *Locke 761* (UARK). Johnson Co.: *Johnson 54* (HXC). Lawrence Co.: *Taylor 1791* (SIU). Lee Co.: *Demaree 37378* (SMU). Lincoln Co.: *Demaree 13739* (SMU). Little River Co.: *Taylor 2149* (SIU). Logan Co.: *Palmer 24152* (MO). Lonoke Co.: *Buchholz s.n.* (UARK). Madison Co.: *Taylor 2001*

(SIU). Marion Co.: *Taylor 1836* (SIU). Miller Co.: *Taylor 1911* (SIU). Mississippi Co.: *Metcalf 645* (US). Monroe Co.: *Taylor 2832* (SIU). Montgomery Co.: *Taylor 1076* (SIU). Nevada Co.: *Taylor 2747* (SIU). Newton Co.: *Moore & Demaree 6386* (UARK). Ouachita Co.: *Taylor 2628* (SIU). Perry Co.: *Demaree 27056* (SMU). Pike Co.: *Demaree 9507* (SMU). Poinsett Co.: *Demaree 28624* (SMU). Polk Co.: *Taylor 2549* (SIU). Pope Co.: *Redfearn 23888* (SMS). Pulaski Co.: *Demaree 8467* (SMU). Randolph Co.: *Taylor 2096* (SIU). St. Francis Co.: *Johnson 486* (HXC). Saline Co.: *Aingworth s.n.* (UARK). Scott Co.: *Taylor 2714* (SIU). Searcy Co.: *Emig 85* (MO). Sebastian Co.: *Taylor 2722* (SIU). Sevier Co.: *Culwell 3239* (UCA). Sharp Co.: *Demaree 26281* (SMU). Stone Co.: *Demaree 59388* (SMU). Union Co.: *Taylor 2633* (SIU). Van Buren Co.: *Palmer 25188* (MO). Washington Co.: *Demaree 2742* (SMU). White Co.: *D. Moore 451040* (UARK). Woodruff Co.: *Johnson 479* (HXC). Yell Co.: *Taylor 2622* (SIU).

38. ***Polypodium virginianum*** L., Sp. Pl. 2: 1085. 1735. [*Polypodium vulgare* var. *virginianum* (L.) Eat.; *Polypodium vulgare* var. *americanum* Hook.]

Usually shaded, sandstone outcrops; chiefly Ozark Highlands and Boston Mountains.

Benton Co.: *D. Moore 410014* (UARK). Cleburne Co.: *Babb 186* (ARKSU). Franklin Co.: *Johnson 526* (HXC). Logan Co.: *Taylor 1042* (SIU). Madison Co.: *Taylor 2002* (SIU). Marion Co.: *D. Moore 480728* (UARK). Newton Co.: *Palmer 27090* (UARK). Pope Co.: *Taylor 1214* (SIU). Searcy Co.: *Demaree 51919* (SMU). Stone Co.: *Taylor 2901* (SIU). Washington Co.: *Harvey 77* (MO).

DENNSTAEDTIACEAE

39. ***Dennstaedtia punctilobula*** (Michx.) Moore, Ind. Fil., 307. 1857. [*Nephrodium punctilobula* Michx.; *Dicksonia punctilobula* (Michx.) Gray]

Crevices and ledges of moist, shaded, sandstone outcrops.

Logan Co.: near summit on N side of Magazine Mountain; *Taylor 1046* (SIU). Stone Co.: Blanchard Springs and City Rock Bluff across the White River from Calico Rock; *D. Moore 390311* (F).

40. ***Pteridium aquilinum*** (L.) Kuhn in Decken, Reisen Ost-Afr. 3: 11. 1879. [*Pteris aquilina* L.]

Open woods, cut-over and burned-over areas, thickets, old fields, roadsides. Two varieties are recognized in the state.

40a. ***Pteridium aquilinum*** var. ***latiusculum*** (Desv.) Underw. ex Heller, Cat. N. Am. Pl., 17. 1909. [*Pteris latiuscula* Desv.; *Pteridium latiusculum* (Desv.) Fries]

This variety is found with greater frequency in the northern third of the state.

Boone Co.: *Demaree s.n.* (UARK). Calhoun Co.: *Demaree 22104* (MO). Carroll Co.: *D. Moore 410188* (UARK). Clay Co.: *Richards 5353* (ARKSU).

Cleburne Co.: *Smith 1488* (UARK). Columbia Co.: *D. Moore 420448* (UARK). Conway Co.: *D. Moore 480371* (UARK). Craighead Co.: *Pyle 589* (UARK). Crawford Co.: *D. Moore 710281* (UARK). Dallas Co.: *Taylor 1138* (SIU). Garland Co.: *Bragg 131* (MO). Grant Co.: *Taylor 2727* (SIU). Greene Co.: *Richards 5494* (ARKSU). Hempstead Co.: *Bush 1045* (MO). Hot Spring Co.: *Palmer 26597* (UARK). Independence Co.: *Thomas 14926* (NLU). Izard Co.: *Taylor 2134* (SIU). Jefferson Co.: *Locke 1030* (UARK). Johnson Co.: *Wright 930* (UARK). Lawrence Co.: *Demaree 31002* (SMU). Lincoln Co.: *Demaree 19185* (MO). Logan Co.: *Pyle 332* (UARK). Lonoke Co.: *Clark 679* (HXC). Marion Co.: *Smith 1420* (SMU). Miller Co.: *Taylor 1916* (SIU). Montgomery Co.: *Taylor 1078* (SIU). Newton Co.: *Taylor 2701* (SIU). Perry Co.: *Demaree 35633* (SMU). Pike Co.: *Taylor 2904* (SIU). Polk Co.: *Taylor 1071* (SIU). Pope Co.: *Taylor 1206* (SIU). Prairie Co.: *Demaree 22307* (MO). Pulaski Co.: *Bailey s.n.* (UARK). Saline Co.: *D. Moore 300068* (UARK). Sevier Co.: *D. Moore 401105* (UARK). Stone Co.: *Taylor 1256* (SIU). Union Co.: *Taylor 1152* (SIU). Van Buren Co.: *Palmer 25176* (UARK). Washington Co.: *Taylor 1157* (SIU). Yell Co.: *Demaree 15935* (SMU).

40b. ***Pteridium aquilinum*** var. ***pseudocaudatum*** (Clute) Heller, Cat. N. Am. Pl., 12. 1909. [*Pteris aquilina* var. *pseudocaudata* Clute]

This variety is the more commonly encountered taxon in the West Gulf Coastal Plain.

Ashley Co.: *Taylor 1890* (SIU). Benton Co.: *D. Moore 450891* (UARK). Bradley Co.: *Demaree 23878* (SMU). Calhoun Co.: *Demaree 16616* (SMU). Clark Co.: *Taylor 2181* (SIU). Cleveland Co.: *Taylor 1139* (SIU). Columbia Co.: *Taylor 1169* (SIU). Conway Co.: *Clark 45* (HXC). Crawford Co.: *D. Moore 50283* (UARK). Cross Co.: *Johnson 440* (HXC). Dallas Co.: *Demaree 19048* (SMU). Drew Co.: *Taylor 1148* (SIU). Faulkner Co.: *Buchholz 988* (UARK). Fulton Co.: *Taylor 2668* (SIU). Garland Co.: *Taylor 2860* (SIU). Grant Co.: *Demaree 16564* (SMU). Greene Co.: *Demaree 26697* (SMU). Hempstead Co.: *D. Moore 480477* (APCR). Hot Spring Co.: *Taylor 2859* (SIU). Howard Co.: *Demaree 9952* (SMU). Independence Co.: *Thomas 7778* (NLU). Jefferson Co.: *Demaree 19457* (SMU). Johnson Co.: *Demaree 20213* (SMU). Lee Co.: *Holmes 81* (SMU). Lincoln Co.: *Demaree 19185* (SMU). Little River Co.: *Taylor 2162* (SIU). Lonoke Co.: *Demaree 8406* (SMU). Marion Co.: *Demaree 29322* (SMU). Miller Co.: *Demaree 24486* (SMU). Montgomery Co.: *Taylor 2220* (SIU). Nevada Co.: *Taylor 2749* (SIU). Perry Co.: *Wright P701* (UARK). Pike Co.: *Taylor 2171* (SIU). Polk Co.: *Demaree 15695* (SMU). Prairie Co.: *Demaree 22307* (SMU). Pulaski Co.: *Taylor 2540* (SIU). Randolph Co.: *Taylor 2101* (SIU). Saline Co.: *Demaree 8545* (SMU). Union Co.: *Hoiberg 326* (SMU). Van Buren Co.: *Wherry s.n.* (PH). Washington Co.: *French s.n.* (APCR). White Co.: *Demaree 26892* (SMU). Yell Co.: *Demaree 20584* (SMU).

THELYPTERIDACEAE

41. ***Thelypteris kunthii*** (Desv.) Morton, Contr. U. S. Nat. Herb. 38: 53. 1967. [*Thelypteris normalis* (C. Chr.) Moxley]

Ashley Co.: roadside in lumbered pine forest; timber access road SE of Lake Georgia-Pacific; sects. 22 and 35, T17S, R9W; *Johnson 281* (HXC).

42. ***Thelypteris noveboracensis*** (L.) Nieuwl., Amer. Midl. Nat. 1: 226. 1910. [*Polypodium noveboracense* L.; *Aspidium noveboracense* (L.) Sw.; *Dryopteris noveboracensis* (L.) Gray]

Moist, rocky soils of woods and thickets along streams; chiefly Ouachita Mountains.

Cleburne Co.: *Johnson 393* (HXC). Garland Co.: *D. Moore 6278* (APCR). Montgomery Co.: *Taylor 1084* (SIU). Pike Co.: *Taylor 2903* (SIU). Polk Co.: *D. Moore 410261* (UARK). Pulaski Co.: *Johnson 112* (HXC). Saline Co.: *D. Moore 480154* (UARK).

43. ***Thelypteris palustris*** Schott, Gen. Fil. t. 10. 1834. [*Acrostichum thelypteris* L.; *Aspidium thelypteris* (L.) Sw.; *Dryopteris thelypteris* (L.) Gray]

Low, marshy areas around ponds and lakes and along streams. Two varieties are recognized in the state.

- 43a. ***Thelypteris palustris*** var. ***haleana*** Fern., Rhodora 31: 34. 1929. [*Dryopteris thelypteris* var. *haleana* (Fern.) Weatherby]

Bradley Co.: cypress swamp near Warren; *Demaree 19445* (SMU). Drew Co.: among grasses and sedges in swamp near Wilmar; *Demaree 24624* (SMU).

- 43b. ***Thelypteris palustris*** var. ***pubescens*** (Laws.) Fern. [*Dryopteris thelypteris* var. *pubescens* (Laws.) Weatherby]

Ashley Co.: *Johnson 276* (HXC). Bradley Co.: *Demaree 19445* (MO). Drew Co.: *D. Moore 420048* (UARK). Greene Co.: *D. Moore 480685* (UARK). Hempstead Co.: *D. Moore 480353* (UARK). IZard Co.: *Johnson 422* (HXC). Lawrence Co.: *Taylor 1794* (SIU). Little River Co.: *Palmer 8359* (MO). Polk Co.: *J. Moore & McWilliams s.n.* (UARK). Sharp Co.: *Wade 167* (UARK). Washington Co.: *Henbest 16* (UARK).

44. ***Thelypteris torresiana*** (Gaud.) Alston, Lilloa 30: 11. 1960.

Ashley Co.: roadside at edge of field; timber access road, W of Crossett, sect. 9, T18S, R9W and roadside in lumbered pine forest; timber access road SE of Lake Georgia-Pacific, sect. 22, T17S, R9W; *Johnson 283* (HXC).

45. ***Phegopteris hexagonoptera*** (Michx.) Fee, Gen. Fil. 243. 1850-52. [*Polypodium hexagonopterum* Michx.; *Dryopteris hexagonoptera* (Michx.) C. Chr.; *Thelypteris hexagonoptera* (Michx.) Weatherby]

Moist, sandy soil on slopes and in ravines of rich woods; Interior Highlands, West Gulf Coastal Plain, and Crowley's Ridge.

Ashley Co.: *Taylor 1877* (SIU). Benton Co.: *D. Moore 410010* (UARK). Bradley Co.: *Demaree 21022* (MO). Carroll Co.: *Palmer 4471* (MO). Clark Co.: *Taylor 2176* (SIU).

Clay Co.: *Bush 2616* (MO). Cleburne Co.: *Smith 1494* (UARK). Conway Co.: *Tucker 7157* (APCR). Craighead Co.: *Demaree 3576* (MO). Cross Co.: *Palmer 31663* (UARK). Drew Co.: *Palmer 44223* (SMU). Faulkner Co.: *Buchholz 946* (UARK). Franklin Co.: *Johnson 521* (HXC). Garland Co.: *Palmer 29210* (UARK). Greene Co.: *Demaree 4002* (SMU). Hempstead Co.: *Bush 5713* (NY). Hot Spring Co.: *Wherry s.n.* (PH). Howard Co.: *McSwain 43E80* (UARK). Independence Co.: *Demaree 17080* (SMU). IZARD Co.: *Thomas s.n.* (NLU). Jefferson Co.: *Stewart 20* (UARK). Johnson Co.: *Redfearn 18929* (SMS). Lawrence Co.: *Taylor 1793* (SIU). Lee Co.: *Taylor 1185* (SIU). Logan Co.: *Palmer 23236* (MO). Madison Co.: *Key 267* (SMS). Marion Co.: *Johnson 92* (HXC). Montgomery Co.: *Taylor 1075* (SIU). Newton Co.: *Taylor 1220* (SIU). Perry Co.: *Demaree 20145* (MO). Phillips Co.: *Taylor 1190a* (SIU). Pike Co.: *Redfearn 24472* (SMS). Poinsett Co.: *Emig 58* (MO). Polk Co.: *Taylor 1066* (SIU). Pope Co.: *Taylor 1203* (SIU). Pulaski Co.: *Haase s.n.* (NY). St. Francis Co.: *Demaree 7234* (UARK). Saline Co.: *Palmer 10549* (MO). Searcy Co.: *Taylor 2582* (SIU). Stone Co.: *Taylor 1254* (SIU). Union Co.: *Taylor 1153* (SIU). Van Buren Co.: *Palmer 24291* (UARK). Washington Co.: *Taylor 1103* (SIU). White Co.: *Johnson 460* (HXC).

ASPLENIACEAE

46. *Asplenium bradleyi* D. C. Eat., Bull. Torrey Bot. Club 4: 11. 1873. [*Asplenium* × *stotleri* Wherry]

Sandstone and novaculite outcrops; chiefly Interior Highlands.

Baxter Co.: *Culwell 3188* (UCA). Benton Co.: *D. Moore 41096* (UARK). Boone Co.: *Redfearn 23716* (SMS). Cleburne Co.: *Johnson 468* (HXC). Conway Co.: *D. Moore 470468* (UARK). Franklin Co.: *Redfearn 21149* (SMS). Garland Co.: *D. Moore 46-092* (UARK). Greene Co.: *Demaree 26704* (SMU). Independence Co.: *Coville 161* (US). IZARD Co.: *Demaree 23437* (SMU). Johnson Co.: *Redfearn 23834* (SMS). Logan Co.: *Haas 135* (MO). Madison Co.: *Taylor 2004* (SIU). Montgomery Co.: *Johnson 180* (HXC). Newton Co.: *Taylor 2699* (SIU). Perry Co.: *Redfearn 23982* (SMS). Polk Co.: *D. Moore & McWilliams 56197* (UARK). Pope Co.: *Taylor 1216* (SIU). Pulaski Co.: *Haase s.n.* (NY). Saline Co.: *Redfearn 24325* (SMS). Searcy Co.: *Redfearn 23721* (SMS). Stone Co.: *Taylor 2902* (SIU). Van Buren Co.: *Demaree 4757* (SIU). Washington Co.: *D. Moore 340680* (UARK). Yell Co.: *Taylor 4368* (SIU).

47. *Asplenium* × *ebenoides* R. R. Scott, Gardener's Monthly 7: 267. 1865. [*Asplenium platyneuron* × *Camptosorus rhizophyllus* Slosson; × *Asplenosorus ebenoides* (R. R. Scott) Wherry]

Johnson Co.: shaded boulder face along road to campground; Haw Creek Falls Recreation Area; W of Fort Douglas; *Johnson 79028* (HXC). This hybrid has been reported from Crawford County along Lee Creek (Moore, 1940) but voucher material has not been located.

48. *Asplenium* × *kentuckiense* McCoy, Amer. Fern J. 25: 104. 1936. [*Asplenium pinnatifidum* × *platyneuron* Wagner]

Benton Co.: growing near both parents on a sandstone outcrop; ca 1 mi. W of old Elkhorn Tavern, Pea Ridge National Military Park; *D. Moore 430114* (MO).

49. ***Asplenium pinnatifidum*** Nutt., Gen. 2: 251. 1818.

Crevices of sandstone and novaculite outcrops; Interior Highlands.

Benton Co.: *Taylor 1123* (SIU). Cleburne Co.: *Johnson 435* (HXC). Garland Co.: *Taylor 2704* (SIU). Independence Co.: *D. Moore 61118* (UARK). Izard Co.: *Johnson 79054* (HXC). Van Buren Co.: *Johnson 437* (HXC).

50. ***Asplenium platyneuron*** (L.) Oakes ex D. C. Eat., Ferns N. Amer. 1: 24. 1878. [*Asplenium ebeneum* Ait.]

Moist to dry, rocky woods, hillsides, ravines, thickets, rock outcrops, stream banks, and roadsides. Three varieties are recognized in the state.

50a. ***Asplenium platyneuron* var. *bacculum-rubrum*** (Featherm.) Fern., *Rhodora* 38: 304. 1936.

Boone Co.: *Haas 2798* (UCA). Cleburne Co.: *Taylor 1017b* (SIU). Johnson Co.: *Taylor 1087* (SIU). Lee Co.: *McDaniel 804* (UARK). Polk Co.: *Taylor 1061* (SIU). Pulaski Co.: *Palmer 23002* (UARK). Stone Co.: *Taylor 1248* (SIU). Van Buren Co.: *Nelson 482* (SIU).

50b. ***Asplenium platyneuron* var. *incisum*** (Howe ex Peck) B. L. Robins., *Rhodora* 10: 29. 1908. [*Asplenium ebeneum* var. *incisum* Peck; *Asplenium ebeneum* var. *serratum* E. S. Miller; *Asplenium platyneuron* var. *serratum* (E. S. Miller) BSP.]

Baxter Co.: *Taylor 2677* (SIU). Benton Co.: *D. Moore 460177* (UARK). Carroll Co.: *Palmer 6351* (MO). Clark Co.: *Taylor 2175* (SIU). Clay Co.: *Taylor 2661* (SIU). Cleveland Co.: *Taylor 2736* (SIU). Conway Co.: *Demaree 23122* (SMU). Craighead Co.: *Demaree 3523* (NY). Crawford Co.: *Taylor 1126* (SIU). Cross Co.: *Akers 20* (HXC). Garland Co.: *Palmer 23106* (MO). Greene Co.: *Richards 5488* (ARKSU). Hempstead Co.: *Palmer 10512* (MO). Howard Co.: *McSwain 43E69* (UARK). Jackson Co.: *Richards 6203* (ARKSU). Lee Co.: *McDaniel 804* (ARKSU). Marion Co.: *Palmer 4747* (MO). Montgomery Co.: *Taylor 2843* (SIU). Nevada Co.: *D. Moore 420470* (UARK). Newton Co.: *Taylor 2700* (SIU). Phillips Co.: *Palmer 25162* (UARK). Pike Co.: *Johnson 177* (HXC). Polk Co.: *Taylor 2850* (SIU). Pulaski Co.: *Wheeler 50* (F). Randolph Co.: *Taylor 2087* (SIU). Saline Co.: *Demaree 23031* (SMU). Sharp Co.: *Demaree 27732* (SMU). Stone Co.: *Johnson 74* (HXC). Washington Co.: *Buchholz s.n.* (US). White Co.: *Johnson 217* (HXC).

50c. ***Asplenium platyneuron* var. *platyneuron*.**

Ashley Co.: *Demaree 16368* (SMU). Baxter Co.: *Taylor 1828* (SIU). Benton Co.: *Taylor 1120* (SIU). Boone Co.: *Demaree s.n.* (UARK). Calhoun Co.: *Demaree 22666* (MO). Carroll Co.: *Palmer 4527* (MO). Clark Co.: *Taylor 2192* (SIU). Clay Co.: *Bush 2646* (MO). Cleburne Co.: *Demaree 30305* (SMU). Cleveland Co.: *Taylor 1017* (SIU). Conway Co.: *Demaree 23122* (MO).

Crawford Co.: *Redfearn* 23642 (SMS). Cross Co.: *Demaree* 19631 (MO). Dallas Co.: *Taylor* 1137 (SIU). Drew Co.: *Demaree* 24348 (MO). Faulkner Co.: *Taylor* 2609 (SIU). Franklin Co.: *Palmer* 8160 (MO). Fulton Co.: *Taylor* 2667 (SIU). Garland Co.: *Taylor* 2193 (SIU). Greene Co.: *Demaree* 26688 (SMU). Hempstead Co.: *Bush* 1452 (US). Hot Spring Co.: *Demaree* 15610 (SMU). Howard Co.: *Kellogg s.n.* (MO). Independence Co.: *Demaree* 17067 (MO). Izard Co.: *Taylor* 2136 (SIU). Jefferson Co.: *Locke* 1223 (UARK). Johnson Co.: *Taylor* 1089 (SIU). Lawrence Co.: *Taylor* 1787 (SIU). Lee Co.: *Demaree* 37381 (SMU). Little River Co.: *Johnson* 475 (HXC). Logan Co.: *Taylor* 1032 (SIU). Lonoke Co.: *Clark* 665 (HXC). Madison Co.: *Taylor* 2005 (SIU). Marion Co.: *Taylor* 1230 (SIU). Miller Co.: *Taylor* 1172 (SIU). Montgomery Co.: *Taylor* 1073 (SIU). Nevada Co.: *D. Moore* 420464 (UARK). Newton Co.: *Taylor* 1224 (SIU). Ouachita Co.: *Hoiberg* 351 (SMU). Perry Co.: *Demaree* 54546 (SMU). Phillips Co.: *Palmer* 25165 (MO). Pike Co.: *Demaree* 9766 (SMU). Polk Co.: *Taylor* 1059 (SIU). Pope Co.: *Taylor* 1204 (SIU). Pulaski Co.: *Demaree* 17347 (MO). Randolph Co.: *Taylor* 1800 (SIU). Saline Co.: *Demaree* 23021 (MO). Scott Co.: *Taylor* 1058 (SIU). Searcy Co.: *Taylor* 1853 (SIU). Sebastian Co.: *Taylor* 2721 (SIU). Sevier Co.: *Taylor* 2164 (SIU). Sharp Co.: *Taylor* 1819 (SIU). Stone Co.: *Taylor* 1257 (SIU). Union Co.: *Taylor* 1163 (SIU). Van Buren Co.: *Redfearn* 16862 (SMS). Washington Co.: *Taylor* 1105 (SIU). White Co.: *D. Moore* 451039 (UARK). Yell Co.: *Taylor* 1192 (SIU).

The striking, deeply dissected *Asplenium platyneuron* f. *hortonae* (Davenp.) L. B. Smith is a sporadic, sterile plant. It was collected in Arkansas from a mossy, rock ledge on Petit Jean Mountain, Conway County by D. M Moore (D. Moore 480355 UARK).

51. ***Asplenium resiliens*** Kunze, *Linnaea* 18: 331. [*Asplenium parvulum* Mart. & Gal.]

Limestone, dolomite, and chert outcrops; primarily Ozark Highlands.

Baxter Co.: *Taylor* 1840 (SIU). Benton Co.: *Demaree* 4654 (F). Boone Co.: *Palmer* 6907 (MO). Carroll Co.: *Palmer* 29314 (MO). Garland Co.: *Engelmann* 10 (MO). Independence Co.: *Demaree* 28594 (SMU). Izard Co.: *Demaree* 17039 (SMU). Johnson Co.: *Johnson* 79033 (HXC). Lawrence Co.: *Taylor* 1788 (SIU). Madison Co.: *Haas* 1437 (UCA). Marion Co.: *Palmer* 43872 (MO). Newton Co.: *Taylor* 2698 (SIU). Randolph Co.: *Demaree* 26813 (SMU). Searcy Co.: *Taylor* 1243 (SIU). Sharp Co.: *Demaree* 26434 (SMU). Stone Co.: *Taylor* 1244 (SIU). Washington Co.: *Demaree* 2797 (UARK).

52. ***Asplenium rhizophyllum*** L., *Sp. Pl.* 2: 1078. 1753. [*Campotosorus rhizophyllum* (L.) Link]

Moist, shaded, limestone and sandstone outcrops; chiefly Ozark Highlands and Boston Mountains.

Baxter Co.: *Taylor 1849* (SIU). Benton Co.: *Demaree 4616* (SMU). Carroll Co.: *Haas 1453* (UCA). Conway Co.: *Johnson 195* (HXC). Crawford Co.: *Redfearn 21086* (SMS). Franklin Co.: *Johnson 520* (HXC). Fulton Co.: *Wheeler 50* (F). Independence Co.: *Thomas 8494* (SMU). Izard Co.: *Barr s.n.* (UARK). Johnson Co.: *Redfearn 23826* (SMS). Lawrence Co.: *Taylor 1785* (SIU). Logan Co.: *Pyle 286* (APCR). Madison Co.: *Taylor 1994a* (SIU). Marion Co.: *D. Moore 380727* (UARK). Newton Co.: *Taylor 2696* (SIU). Pope Co.: *Taylor 1213* (SIU). Randolph Co.: *Demaree 26812* (SMU). Searcy Co.: *Taylor 2574* (SIU). Sharp Co.: *Demaree 25922* (SMU). Stone Co.: *Taylor 1246* (SIU). Van Buren Co.: *Palmer 24292* (UARK). Washington Co.: *Henbest 14* (UARK).

—. ***Asplenium ruta-muraria* L.**, Sp. Pl. 2: 1079. 1753. [*Asplenium cryptolepis* Fern.]

Asplenium ruta-muraria was first reported from Arkansas in the list of Nuttall (1835). Lesquereux (1860) recorded this species from "limestone cliffs." Harvey (1881) also included *A. ruta-muraria* in his list, stating that he had specimens from Lesquereux said to have been collected in northeast Arkansas. Although no specimens have been located to confirm its presence in the state, *A. ruta-muraria* is included here on the basis of the above reports.

Asplenium ruta-muraria has been collected from a number of counties in southeast Missouri plus Stone, Ozark, Howell, Oregon, and Ripley Counties which border Arkansas to the north. In Missouri, *A. ruta-muraria* is found on north- and east-facing limestone outcrops (Steyermark, 1963, p. 30). Similar sites occur in the Ozark Highlands of Arkansas and field work in this region should yield specimens.

53. ***Asplenium trichomanes* L.**, Sp. Pl. 2: 1080. 1753. [*Asplenium melanocaulon* Willd.]

Moist rock outcrops; Interior Highlands.

Baxter Co.: *Taylor 2685* (SIU). Benton Co.: *Taylor 1117* (SIU). Boone Co.: *Demaree 3246* (NY). Carroll Co.: *Palmer 5615* (MO). Cleburne Co.: *Palmer 6952* (MO). Conway Co.: *Demaree 23123* (MO). Crawford Co.: *Taylor 1098* (SIU). Faulkner Co.: *Buchholz 995* (UARK). Franklin Co.: *Taylor 1128* (SIU). Fulton Co.: *Palmer 14691* (MO). Garland Co.: *Palmer 23105* (UARK). Howard Co.: *Kellogg s.n.* (MO). Independence Co.: *Demaree 17099* (MO). Izard Co.: *Demaree 3275* (UARK). Johnson Co.: *Redfearn 23847* (SMS). Logan Co.: *Taylor 1031* (SIU). Madison Co.: *Davis 1503* (UARK). Marion Co.: *Taylor 1232* (SIU). Montgomery Co.: *J. Moore 3154* (UCA). Newton Co.: *Redfearn 23102* (SMS). Perry Co.: *Redfearn 24135* (SMS). Polk Co.: *J. Moore s.n.* (UARK). Pope Co.: *Robinette 2789* (UCA). Pulaski Co.: *Owens s.n.* (US). Sebastian Co.: *Taylor 2720* (SIU). Stone Co.: *D. Moore 450518* (UARK). Van Buren Co.: *Taylor 2561* (SIU). Washington Co.: *Demaree 3007* (UARK). White Co.: *Johnson 453* (HXC). Yell Co.: *Taylor 1194* (SIU).

54. ***Onoclea sensibilis* L., Sp. Pl. 2: 1062. 1753.**

Moist to wet soil along margins of streams and lakes, in meadows, woods, roadside ditches, and around springs.

Ashley Co.: *Taylor 1888* (SIU). Benton Co.: *Pyle s.n.* (UARK). Bradley Co.: *Demaree 23832* (SMU). Calhoun Co.: *Hoiberg 307* (SMU). Clark Co.: *Demaree 21920* (SMU). Clay Co.: *Demaree 4140* (NY). Cleburne Co.: *Babb 977* (ARKSU). Columbia Co.: *Johnson 33* (HXC). Conway Co.: *J. Moore 5* (UARK). Craighead Co.: *Demaree 7038* (SMU). Crawford Co.: *Taylor 1095* (SIU). Cross Co.: *D. Moore 420380* (UARK). Faulkner Co.: *Spencer 52* (HXC). Garland Co.: *Palmer 24933* (UARK). Franklin Co.: *Davis 444* (UARK). Greene Co.: *Demaree 26661* (SMU). Hempstead Co.: *Taylor 1175* (SIU). Independence Co.: *Johnson 500* (HXC). Johnson Co.: *Redfearn 23828* (SMS). Lawrence Co.: *Taylor 2595* (SIU). Lee Co.: *Davis 331* (ARKSU). Little River Co.: *Taylor 2141* (SIU). Marion Co.: *Thomas 16197* (SMU). Montgomery Co.: *Taylor 2210* (SIU). Nevada Co.: *D. Moore 410340* (UARK). Newton Co.: *Redfearn 27519* (SMS). Ouachita Co.: *Demaree 61376* (SMU). Perry Co.: *J. Moore 3318* (UCA). Phillips Co.: *Palmer 25128* (UARK). Pike Co.: *Demaree 9974* (MO). Poinsett Co.: *Demaree 3671* (SMU). Polk Co.: *J. Moore 3150* (ARKSU). Pope Co.: *Redfearn 17341* (SMS). Pulaski Co.: *Johnson 114* (HXC). St. Francis Co.: *Lowman 372* (HXC). Saline Co.: *Demaree 53157* (SIU). Searcy Co.: *Taylor 2577* (SIU). Sevier Co.: *Johnson 150* (HXC). Union Co.: *Taylor 1160* (SIU). Van Buren Co.: *Haas 1477* (ARKSU). Washington Co.: *Buchholz 1010* (UARK). White Co.: *Johnson 210* (HXC). Woodruff Co.: *Johnson 442* (HXC).

Onoclea sensibilis f. *obtusilobata* (Schkuhr) Gilb., with fronds somewhat intermediate in form between normal sterile and fertile fronds, was collected by F. L. Harvey without location (UARK 13) and by D. M. Moore at Crowley's Ridge State Park, Greene County (*D. Moore 480680* UARK).

55. ***Athyrium filix-femina* (L.) Roth subsp. *asplenioides* (Michx.) Hulten, Kgl. Sv. Vet. Akad. Handl. 8: 178. 1962. [*Nephrodium asplenioides* Michx.; *Athyrium asplenioides* (Michx.) A. A. Eat.; *Asplenium asplenioides* (Michx.) Chapm.; *Athyrium filix-femina* var. *asplenioides* (Michx.) Farw.]**

Moist woodlands, stream banks, marshy areas around ponds and lakes, roadsides.

Ashley Co.: *Taylor 1876* (SIU). Benton Co.: *Buchholz s.n.* (UARK). Bradley Co.: *Locke 547* (UARK). Calhoun Co.: *Demaree 22107* (MO). Carroll Co.: *Palmer 3813* (NY). Clark Co.: *Taylor 2177* (SIU). Clay Co.: *Rosen 90* (UARK). Cleburne Co.: *Taylor 1014* (SIU). Columbia Co.: *Taylor 1167* (SIU). Conway Co.: *Demaree 37230* (SMU). Craighead Co.: *Demaree 3569* (MO). Crawford Co.: *Moore 710287* (UARK). Cross Co.: *Palmer 31665* (UARK). Dallas Co.: *Miller 682* (UARK). Drew Co.: *Demaree 22101* (SMU). Faulkner Co.: *Buchholz s.n.* (UARK). Franklin Co.: *D. Moore 340684* (UARK). Garland Co.: *Taylor 2555* (SIU). Grant Co.: *Taylor 2723* (SIU). Greene Co.: *Demaree 26695* (SMU). Hempstead Co.: *Taylor 1177* (SIU). Hot Spring Co.: *Palmer 26592*

(UARK). Howard Co.: *D. Moore 410263* (UARK). Independence Co.: *Demaree 17099* (SMU). Izard Co.: *Demaree 23512* (SMU). Jefferson Co.: *Demaree 24069* (MO). Johnson Co.: *D. Moore 450275* (UARK). Lawrence Co.: *Demaree 520965* (SIU). Little River Co.: *Palmer 8353* (MO). Logan Co.: *Taylor 1038* (SIU). Lonoke Co.: *Clark 663* (HXC). Madison Co.: *Davis 1504* (UARK). Miller Co.: *Palmer 10530* (MO). Montgomery Co.: *Taylor 1072* (SIU). Nevada Co.: *Bush 694* (MO). Newton Co.: *D. Moore 480752* (UARK). Ouachita Co.: *D. Moore 490652* (UARK). Perry Co.: *J. Moore 6616* (UCA). Phillips Co.: *Palmer 25146* (UARK). Pike Co.: *Taylor 2169* (SIU). Poinsett Co.: *Demaree 3667* (SMU). Polk Co.: *Taylor 1069* (SIU). Pope Co.: *Robinette 2795* (UCA). Pulaski Co.: *Demaree 8899* (SMU). St. Francis Co.: *Clark 613* (HXC). Saline Co.: *Demaree 23034* (MO). Union Co.: *Taylor 1160* (SIU). Van Buren Co.: *Palmer 24294* (MO). Washington Co.: *Hite 23* (UARK). White Co.: *Johnson 458* (HXC).

The narrow blade form of subsp. *asplenioides*, which has "the blade narrowed below so as to approach an elliptic outline," has been distinguished as f. *ellipticum* by Wherry (1948) and has been collected from a number of counties in the state. However, in Arkansas it appears that this form is scarcely justifiable for fronds assignable to f. *ellipticum* may be found in nearly every population of subsp. *asplenioides*. Elliptical blades have been noted particularly in juvenile plants and in early, spring foliage.

The striking, highly dissected f. *subtripinnatum* Butters, which has pinnules that are deeply cut into oblong segments, was collected in Pike County by D. Demaree (F 1420306). Additional collections from Harrisburg, Poinsett County; Pelsor, Pope County; and Grassy Lake, Hempstead County have been reported by Moore (1940).

56. **Athyrium pycnocarpon** (Spreng.) Tidest., Elys. Marianum 1: 36. 1906. [*Asplenium angustifolium* Michx.; *Asplenium pycnocarpon* Spreng.; *Diplazium angustifolium* (Michx.) Butters; *Diplazium pycnocarpon* (Spreng.) Broun]

Rocky slopes and ravines in moist, rich woods; primarily Ozark Highlands and Boston Mountains.

Benton Co.: *Demaree 4494* (SMU). Carroll Co.: *Palmer 3813* (US). Cleburne Co.: *Babb 1596* (ARKSU). Crawford Co.: *Taylor 1097* (SIU). Franklin Co.: *Davis 1357* (UARK). Independence Co.: *Thomas 8568* (NLU). Johnson Co.: *Redfearn 18927* (SMS). Marion Co.: *D. Moore 410516* (UARK). Newton Co.: *Taylor 2694* (SIU). Phillips Co.: *Clark 446* (HXC). Pope Co.: *Tucker 3545* (APCR). Searcy Co.: *D. Moore 350149* (UARK). Stone Co.: *Graham 373* (APCR). Van Buren Co.: *Palmer 24302* (UARK). Washington Co.: *Palmer 27037* (MO).

57. **Athyrium thelypteroides** (Michx.) Desv., Mem. Soc. Linn. Paris 6: 266. 1827. [*Asplenium acrostichoides* Sw.; *Asplenium thelypteroides* Michx.; *Diplazium acrostichoides* (Sw.) Butters]

Moist, rich woods; near streams and on shaded slopes.

Hot Spring Co.: *Redfearn 24143* (SMS). Johnson Co.: *Johnson 47* (HXC). Logan Co.: *D. Moore 420124* (SMU). Madison Co.: *Davis 1506* (UARK). Phillips Co.: *Akers 42* (HXC).

58. ***Cystopteris bulbifera*** (L.) Bernh., Neu. Journ. Bot. Schrad. 1(2): 10. 1806. [*Polypodium bulbiferum* L.]

Moist, shaded outcrops of limestone, dolomite, calcareous sandstone and shale; primarily Ozark Highlands.

Baxter Co.: *D. Moore 510522* (UARK). Benton Co.: *Demaree 4897* (F). Carroll Co.: *D. Moore 58218* (UARK). Fulton Co.: *Wheeler 13* (F). Howard Co.: *Kellogg s.n.* (MO). Independence Co.: *Thomas 8302* (NLU). Johnson Co.: *Redfearn 23832* (SMS). Madison Co.: *Palmer 24796* (MO). Marion Co.: *Palmer 4780* (MO). Newton Co.: *Taylor 2693* (SIU). Pope Co.: *Key 383* (SMS). St. Francis Co.: *Johnson 441* (HXC). Searcy Co.: *Taylor 2579* (SIU). Sharp Co.: *Demaree 26436* (SMU). Stone Co.: *Taylor 2899* (SIU). Van Buren Co.: *Palmer 25192* (MO). Washington Co.: *Palmer 27033* (MO).

59. ***Cystopteris protrusa*** (Weatherby) Blasdell, Mem. Torrey Bot. Club 21: 41. 1963. [*Cystopteris fragilis* var. *protrusa* Weatherby]

Moist, shaded, humus-rich, loam soils of woodlands; Interior Highlands and Crowley's Ridge.

Benton Co.: *Demaree 6517* (UARK). Craighead Co.: *Richards 6346* (ARKSU). Crawford Co.: *Taylor 1100* (SIU). Franklin Co.: *Johnson 528* (HXC). Garland Co.: *D. Moore 480192* (UARK). Hot Spring Co.: *Palmer 29708* (UARK). Johnson Co.: *Johnson 48* (HXC). Logan Co.: *Taylor 1047* (SIU). Newton Co.: *D. Moore 480225* (UARK). Phillips Co.: *Lowman 98* (HXC). Polk Co.: *Taylor 1065* (SIU). Searcy Co.: *D. Moore 350143* (UARK). Sharp Co.: *Demaree 27712* (SMU). Stone Co.: *D. Moore 510354* (UARK). Van Buren Co.: *Johnson 152* (HXC). Washington Co.: *Hite 24* (UARK). White Co.: *Johnson 221* (HXC).

60. ***Cystopteris tennesseensis*** Shaver, Journ. Tenn. Acad. Sci. 25: 107. 1950. [*Cystopteris fragilis* f. *simulans* Weatherby; *Cystopteris fragilis* var. *simulans* (Weatherby) McGregor; *Cystopteris fragilis* var. *tennesseensis* (Shaver) McGregor]

Moist, shaded outcrops of sandstone, limestone, dolomite, and shale; Interior Highlands.

Baxter Co.: *Taylor 2679* (SIU). Benton Co.: *Taylor 1122* (SIU). Conway Co.: *J. Moore 1089* (SMU). Fulton Co.: *Wheeler 39* (UARK). Independence Co.: *Thomas 7753* (NLU). Izard Co.: *Taylor 1267* (SIU). Johnson Co.: *Redfearn 23833* (SMS). Logan Co.: *Pyle 280* (APCR). Madison Co.: *Key 270* (SMS). Marion Co.: *Taylor 1235* (SIU). Newton Co.: *Redfearn 23479* (SMS). Pope Co.: *D. Moore 520756* (UARK). Randolph Co.: *Demaree 26816* (SMU). Scott Co.: *Demaree 58499* (UARK). Searcy Co.: *Taylor 1240* (SIU). Stone Co.: *Taylor 1245* (SIU). Van Buren Co.: *Demaree 4753* (UARK). Washington Co.: *Haas 1471* (UCA).

61. **Woodsia obtusa** (Spreng.) Torr., Cat. Pl. in Geol. Rep. N. Y., 195. 1840. [*Polypodium obtusum* Spreng.]

Well drained, rocky or sandy soils of woodlands, rock outcrops, along roadsides and fence rows, occasionally on old rock walls.

Baxter Co.: *Taylor 1829* (SIU). Benton Co.: *Taylor 1121* (SIU). Boone Co.: *D. Moore 490380* (UARK). Calhoun Co.: *Demaree 22105* (SMU). Carroll Co.: *Palmer 4537* (MO). Clark Co.: *Taylor 2190* (SIU). Clay Co.: *Demaree 30417* (SMU). Cleburne Co.: *Taylor 1018* (SIU). Cleveland Co.: *Taylor 2737* (SIU). Columbia Co.: *Thomas 27931* (NLU). Conway Co.: *Demaree 23115* (SIU). Crawford Co.: *Taylor 1099* (SIU). Cross Co.: *Richards 3946* (ARKSU). Faulkner Co.: *Taylor 2011* (SIU). Franklin Co.: *Taylor 1129* (SIU). Fulton Co.: *Taylor 2666* (SIU). Garland Co.: *Taylor 2232* (SIU). Greene Co.: *Hess 1132* (SMU). Hempstead Co.: *Bush 5711* (MO). Hot Spring Co.: *Demaree 16539* (SMU). Howard Co.: *McSwain 43E70* (UARK). Independence Co.: *Demaree 27150* (SMU). Izard Co.: *Taylor 2137* (SIU). Jefferson Co.: *Locke 1224* (UARK). Johnson Co.: *Taylor 1088* (SIU). Lawrence Co.: *Taylor 1786* (SIU). Lee Co.: *Demaree 37377* (SMU). Little River Co.: *Johnson 474* (HXC). Logan Co.: *Taylor 1033* (SIU). Madison Co.: *Taylor 1997* (SIU). Marion Co.: *Taylor 1229* (SIU). Miller Co.: *Taylor 1910* (SIU). Montgomery Co.: *Taylor 1081* (SIU). Newton Co.: *D. Moore 480228* (UARK). Ouachita Co.: *Demaree 63771* (SIU). Perry Co.: *Demaree 27051* (SMU). Pike Co.: *Taylor 2170* (SIU). Polk Co.: *Hoiberg 560* (SMU). Pope Co.: *Taylor 1200* (SIU). Pulaski Co.: *Demaree 17375* (MO). Randolph Co.: *Taylor 1081* (SIU). St. Francis Co.: *Demaree 22149* (SMU). Saline Co.: *Demaree 23042* (SMU). Scott Co.: *Taylor 2715* (SIU). Searcy Co.: *Taylor 1241* (SIU). Sebastian Co.: *Taylor 2712* (SIU). Sharp Co.: *Taylor 1817* (SIU). Stone Co.: *Taylor 1249* (SIU). Van Buren Co.: *Wherry s.n.* (PH). Washington Co.: *Taylor 1115* (SIU). White Co.: *Demaree 26902* (SMU). Yell Co.: *Taylor 1193* (SIU).

62. **Woodsia scopulina** D. C. Eat. var. **appalachiana** (T. M. C. Taylor) Morton, Amer. Fern J. 40: 224. 1950. [*Woodsia appalachiana* T. M. C. Taylor]

Logan Co.: ledges of sandstone outcrops and talus on north side, near summit of Magazine Mountain; *Taylor 1045* (SIU).

63. **Polystichum acrostichoides** (Michx.) Schott, Gen. Fil. pl. 9. 1834. [*Nephrodium acrostichoides* Michx.; *Aspidium acrostichoides* (Michx.) Sw.]

Rich, rocky, wooded slopes and ravines, along stream banks, and in alluvial woods; nearly throughout the state.

Arkansas Co.: *Wherry s.n.* (PH). Ashley Co.: *Taylor 1878* (SIU). Baxter Co.: *D. Moore 450747* (UARK). Benton Co.: *D. Moore 460154* (UARK). Boone Co.: *Demaree s.n.* (UARK). Bradley Co.: *Demaree 21025* (UARK). Carroll Co.: *Bush 15424* (UARK). Clark Co.: *Taylor 2174* (SIU). Clay Co.: *Demaree 27019* (SMU). Cleburne Co.: *Taylor 1021* (SIU). Cleveland Co.: *Locke 2268* (UARK). Columbia Co.: *Johnson 35* (HXC). Conway Co.: *Demaree 22791* (MO). Craighead Co.: *Demaree 3493* (SMU). Crawford Co.: *Taylor 1094* (SIU). Cross Co.: *Palmer 31660* (UARK). Dallas Co.: *Taylor 1134*

(SIU). Drew Co.: *Palmer 44222* (SMU). Faulkner Co.: *Buchholz 929* (UARK). Franklin Co.: *Johnson 519* (HXC). Fulton Co.: *Wheeler 40* (F). Garland Co.: *Taylor 2194* (SIU). Grant Co.: *Taylor 2725* (SIU). Greene Co.: *Demaree 4009* (NY). Hempstead Co.: *Bush 1651* (NY). Hot Spring Co.: *Palmer 26575* (MO). Howard Co.: *McSwain 43E65* (UARK). Independence Co.: *Demaree 17068* (MO). IZARD Co.: *Taylor 2135* (SIU). Jefferson Co.: *Demaree 24084* (MO). Johnson Co.: *D. Moore 450264* (UARK). Lawrence Co.: *Taylor 1792* (SIU). Lee Co.: *Taylor 1184* (SIU). Logan Co.: *Taylor 1034* (SIU). Lonoke Co.: *Clark 680* (HXC). Madison Co.: *Taylor 1996* (SIU). Marion Co.: *Taylor 1236* (SIU). Miller Co.: *Taylor 1173* (SIU). Montgomery Co.: *Taylor 1074* (SIU). Nevada Co.: *D. Moore 420463* (UARK). Newton Co.: *Taylor 1222* (SIU). Ouachita Co.: *Demaree 16844* (MO). Perry Co.: *Taylor 2852* (SIU). Phillips Co.: *Taylor 1189* (SIU). Pike Co.: *Demaree 9419* (SMU). Poinsett Co.: *D. Moore 31057* (APCR). Polk Co.: *Taylor 1068* (SIU). Pope Co.: *Taylor 1205* (SIU). Prairie Co.: *Taylor 1182* (SIU). Pulaski Co.: *Merrill 1425* (UARK). St. Francis Co.: *Demaree 22156* (MO). Saline Co.: *Palmer 8442* (MO). Scott Co.: *Taylor 1056* (SIU). Searcy Co.: *Taylor 1851* (SIU). Sevier Co.: *Brinkley 349* (F). Sharp Co.: *Schmitt 11* (ARKSU). Stone Co.: *Taylor 1252* (SIU). Union Co.: *Taylor 1154* (SIU). Van Buren Co.: *Taylor 2563* (SIU). Washington Co.: *Taylor 1104* (SIU). White Co.: *Johnson 455* (HXC). Yell Co.: *Taylor 1196* (SIU).

FronDS of *Polystichum acrostichoides*, which bear pinnae that are coarsely serrate to lobed and that sometimes have scattered sori extending to the tips of the lower pinnae, have been recognized as f. *incisum* (Gray) Gilb. Specimens bearing these variously cut pinnae and scattered sori have been noted from a number of collections in the state.

64. ***Dryopteris celsa*** (W. Palmer) Small, Ferns Southeastern States, 284. 1938. [*Dryopteris goldiana* var. *celsa* W. Palmer]

Moist to wet, shaded, rocky humus around seeps near streams in rich woods.

Lawrence Co.: York Springs; ca. 3.5 mi. S of Imboden; *Marshall 9* (US). Montgomery Co.: along Forest Service Road 43; ca. 0.7 mi. S of jct. with Hwy. 8; *Taylor 2845* (SIU). Polk Co.: valley of Big Fork Creek on north side of Missouri Mountain; along Forest Service Road 38; ca. 2 mi. S of Big Fork and along Forest Service Road 216; ca. 1 mi. N of Big Fork; *D. Moore 520840* (US).

65. ***Dryopteris* × *leedsii*** Wherry, *Bartonia* 21: 2. 1942.

Van Buren Co.: moist, wooded, rocky slope below northwest-facing bluffs; along the west bank of the Middle Fork of the Little Red River; ca. 0.5 mi. SW of Shirley; sect. 25, T12N, R13W; *Taylor 2597* (SIU).

66. ***Dryopteris marginalis*** (L.) Gray, *Man.* 632. 1848. [*Polypodium marginale* L.; *Aspidium marginale* (L.) Sw.; *Nephrodium marginale* (L.) Michx.; *Thelypteris marginalis* (L.) Nieuw.]

Rich, rocky slopes and ravine woods, exposed or shaded outcrops; Interior Highlands.

Baxter Co.: *Taylor 2689* (SIU). Benton Co.: *Taylor 1119* (SIU). Boone Co.: *Redfearn 12376* (SMS). Cleburne Co.: *Palmer 6964* (MO). Conway Co.: *Demaree 22792* (MO). Crawford Co.: *Redfearn 21082* (SMS). Faulkner Co.: *Buchholz 950* (UARK). Franklin Co.: *Stephens 10582* (NY). Garland Co.: *Taylor 2195* (SIU). Hot Spring Co.: *Demaree 19033a* (NY). Independence Co.: *D. Moore 450510* (UARK). IZARD Co.: *Taylor 2132* (SIU). Johnson Co.: *Redfearn 18920* (SMS). Logan Co.: *Taylor 1039* (SIU). Madison Co.: *Taylor 1999* (SIU). Marion Co.: *D. Moore 41052* (UARK). Montgomery Co.: *Taylor 1085* (SIU). Newton Co.: *Redfearn 23587* (SMS). Perry Co.: *Johnson 481* (HXC). Pike Co.: *Demaree 9486* (SMU). Polk Co.: *Taylor 1060* (SIU). Pope Co.: *Taylor 1212* (SIU). Pulaski Co.: *Demaree 8477* (MO). Searcy Co.: *Spessard 149* (HXC). Scott Co.: *Taylor 271* (SIU). Sebastian Co.: *Palmer 33287* (NY). Stone Co.: *D. Moore 450610* (UARK). Van Buren Co.: *Taylor 2562* (SIU). Washington Co.: *Redfearn 14818* (SMS). White Co.: *Johnson 216* (HXC). Yell Co.: *Taylor 1195* (SIU).

Two luxuriant forms of *Dryopteris marginalis* have been collected in Arkansas. Forma *tripinnatifida* (Clute) Weatherby, which has pinnules that are deeply lobed, has been found in Montgomery County at Camp Albert Pike along the Little Missouri River (*Taylor 1085* SIU). Forma *elegans* (J. Robinson) F. W. Gray, with the pinnules pinnatifid, long, and overlapping the pinnules of adjacent pinnae, has been collected from Magnet Cove, Hot Spring County (*Demaree 19033a* NY).

67. ***Dryopteris spinulosa*** (O. F. Muell.) Watt, Can. Nat. II 3: 159. 1867. [*Polypodium spinulosum* O. F. Muell.; *Aspidium spinulosum* (O. F. Muell.) Sw.; *Dryopteris austriaca* var. *spinulosa* (O. F. Muell.) Fiori; *Dryopteris carthusiana* (Villars) H. P. Fuchs]

Stone Co.: rich, moist humus on a limestone outcrop sloping toward the entrance of Rowland Cave; ca. 1 mi. N of Fifty-six; *Taylor 2894* (SIU).

BLECHNACEAE

68. ***Lorinseria areolata*** (L.) Presl, Epim. Bot. 72. 1851. [*Acrostichum areolatum* L.; *Woodwardia angustifolia* J. Smith; *Woodwardia areolata* (L.) Moore]

Moist to wet woods, along streams, marshy areas, roadside ditches, occasionally on sandstone outcrops; primarily Ouachita Mountains and West Gulf Coastal Plain.

Bradley Co.: *Demaree 18381* (MO). Cleburne Co.: *Johnson 436* (HXC). Clark Co.: *Taylor 2180* (SIU). Columbia Co.: *Taylor 1170* (SIU). Conway Co.: *Culwell 3328* (UCA). Crawford Co.: *D. Moore 66121* (APCR). Cross Co.: *Richards 3963* (ARKSU). Dallas Co.: *Taylor 2733* (SIU). Drew Co.: *D. Moore 420045* (UARK). Franklin Co.: *Barber 1026* (UARK). Garland Co.: *Taylor 2556* (SIU). Grant Co.: *Demaree 57196* (SIU). Hempstead Co.: *Taylor 1176* (SIU). Hot Spring Co.: *D. Moore 440088* (UARK).

Howard Co.: *McSwain 43E128* (UARK). Independence Co.: *Johnson 302* (HXC). Izard Co.: *Demaree 22436* (MO). Jefferson Co.: *Demaree 24294* (SMU). Logan Co.: *D. Moore 510073* (UARK). Lonoke Co.: *Clark 662* (HXC). Madison Co.: *Taylor 4274* (SIU). Miller Co.: *Taylor 1908* (SIU). Montgomery Co.: *Taylor 1079* (SIU). Nevada Co.: *Pule 587* (UARK). Ouachita Co.: *D. Moore 490668* (UARK). Perry Co.: *J. Moore 6603* (UCA). Pike Co.: *Taylor 2910* (SIU). Poinsett Co.: *Pyle 587* (UARK). Polk Co.: *Taylor 2552* (SIU). Pope Co.: *Tucker 16079* (APCR). Pulaski Co.: *Demaree 8478* (SMU). Saline Co.: *Haas 1435* (UCA). Stone Co.: *Tucker 3581* (APCR). Union Co.: *Demaree 19408* (SMU). Yell Co.: *Taylor 4367* (SIU).

A frond of *Lorinseria areolata* collected in Pike County by D. Demaree (*Demaree 9785* HXC) has the blade abnormally expanded so that it is more or less intermediate between a fertile and sterile frond. This intermediate condition has been described as f. *obtusilobata* by Waters (1903, p. 128).

69. **Woodwardia virginica** (L.) J. Smith, Mem. Acad. Turin 5: 411. 1793. [*Blechnum virginicum* L.; *Anchistea virginica* (L.) Presl]

Low, wet, sandy soil of woodlands; chiefly West Coastal Plain.

Cleveland Co.: *Taylor 1141* (SIU). Columbia Co.: *Taylor 1166* (SIU). Garland Co.: *D. Moore 410418* (UARK). Hempstead Co.: *D. Moore 56179* (UARK). Hot Spring Co.: *D. Moore 440081* (UARK). Jefferson Co.: *Locke 1309* (UARK). Nevada Co.: *D. Moore 490643* (UARK). Saline Co.: *D. Moore 410434* (UARK). Union Co.: *D. Moore 410335* (UARK).

MARSILEACEAE

70. **Marsilea uncinata** A. Br., Flora 22: 304. 1839. [*Marsilea vestita* var. *uncinata* (A. Br.) Baker]

Margins of ponds, small streams and swamps in the Arkansas River Valley and the Mississippi Alluvial Plain.

Arkansas Co.: edge of pond; Arkansas Post National Memorial; *Taylor 1863* (SIU). Chicot Co.: muddy flat inside levee near small stream; Refuge Plantation; ca. 0.3 mi. S of Hwy. 82; *McDaniel 20043* (SIU). Crawford Co.: in water along edge of swamp; "old government ditch" near W end of Vine Prairie Lake; ca. 3 mi. SW of Mulberry; *Barber s.n.* (APCR). Pulaski Co.: a small pond in the Arkansas River bottoms below Little Rock; near Sevier's farm; *Engelmann 33* TYPE (MO).

71. **Marsilea vestita** var. **mucronata** (A. Br.) Baker, J. Bot. 24: 279. 1886. [*Marsilea mucronata* A. Br.]

Bradley Co.: temporary pools in hard pan of open, savanna like area; ca. 7 mi. SE of Warren; *Demaree 18969* (MO).

72. **Pilularia americana** A. Br., Monatsb. Kon., Akad. Wiss. Berlin 1863, 435. 1864.

Margins of lakes; Interior Highlands.

Conway Co.: Cedar Lake and Bailey Lake; *Taylor 2883* (SIU). Faulkner Co.: Beaverfork Lake; *J. Moore 6608* (UCA). Garland Co.: Lake Hamilton; *D. Moore 480532* (UARK). Logan Co.: Cove Lake; *D. Moore 490427* (UARK). Sebastian Co.: near Ft. Smith; *Nuttall 180* TYPE (MO). Washington Co.: Lake Wedington; *D. Moore 480774* (MO).

AZOLLACEAE

73. *Azolla mexicana* Presl, Abh. Bohm. Ges. Wiss. 3: 150. 1845.

Floating on still waters of lakes, ponds, creeks, and ditches or occasionally stranded along their desiccated margins.

Arkansas Co.: *Taylor 1858* (SIU). Chicot Co.: *Taylor 1869* (SIU). Conway Co.: *Johnson 478* (HXC). Crittenden Co.: *Taylor 2822* (SIU). Drew Co.: *Demaree 17625* (SMU). Faulkner Co.: *Engelmann 127* (MO). Hempstead Co.: *Taylor 1180* (SIU). Jefferson Co.: *Locke 2133* (UARK). Lawrence Co.: *McNalty 652* (ARKSU). Phillips Co.: *Richards 4793* (ARKSU). Pulaski Co.: *Engelmann 126* (MO). St. Francis Co.: *McDaniel 1097* (NY). Washington Co.: *D. Moore 4184* (UARK).

DOUBTFUL AND EXCLUDED TAXA

***Asplenium montanum* Willd.**

Small (1938) included Arkansas in the range he gave for *A. montanum*. No voucher specimens have been found to support the occurrence of this species in Arkansas.

***Athyrium filix-femina* subsp. *angustum* (Willd.) Clausen**

[*Athyrium angustum* (Willd.) Presl]

Scully (1939) reported *A. angustum* from Hot Springs National Park. The isolated occurrence of this northern taxon in southern Arkansas is doubtful. No specimens have been found to support its presence in the state.

***Azolla caroliniana* Willd.**

On the basis of vegetative characters and the occurrence of septate glochidia (when reproductive structures are present), all the Arkansas material of *Azolla* has been identified as *A. mexicana*.

***Botrychium multifidum* var. *silaifolium* (Presl) Broun**

Moore (1940) listed this plant from "low woods, St. Francis River and Hempstead County." The presence of this northern taxon in Arkansas is untenable. No specimens have been found to support such a listing for Arkansas.

Cheilanthes eatoni Baker

Branner and Coville (1891) reported this plant "in clefts in the rocks at Mountain Park, Big Rock, near Little Rock." Coville's specimen of *C. eatoni* has been found to be *C. tomentosa* (Buchholz, 1924).

Cystopteris fragilis (L.) Bernh.

All of the Arkansas specimens that have been identified as *C. fragilis* or *C. fragilis* var. *mackayi* Laws. are either *C. protrusa* or *C. tennesseensis*.

Dryopteris clintoniana var. **australis** Wherry [*D.* × *australis* (Wherry) Small]

The listing of this taxon in Arkansas (Moore, 1940) is based on a misidentification. Specimens bearing this name are referable to *D.* × *leedsii*.

Dryopteris cristata (L.) Gray

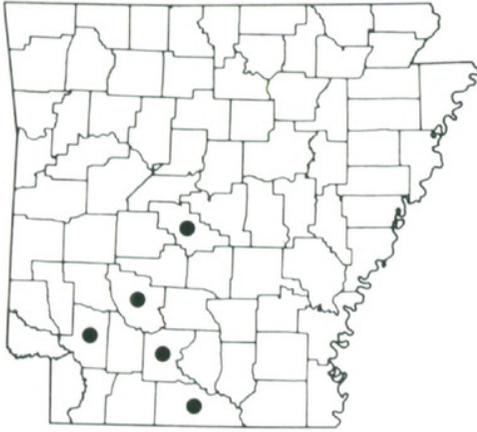
Reports of this species in Arkansas apparently are founded on misidentifications. *Dryopteris cristata* has been maintained in all Arkansas pteridophyte lists since Lesquereux (1860) reported it in "swamps and woods". Moore (1940) also described this species as occurring in the "swamps of southeastern Arkansas." *Dryopteris cristata* is a northern species with a circumboreal distribution and reports as far south as "southeastern Arkansas" are extremely dubious (Thomas, Wagner, and Mesler, 1973). Repeated searches for Arkansas voucher specimens of this plant have been unsuccessful.

Equisetum laevigatum Engelm. [*E. kansanum* Schaffner]

Moore (1940) reported this species from Newton and Faulkner Counties. All specimens that have been examined from Arkansas, and identified as *E. laevigatum*, are referable to either *E. hyemale* var. *affine* or *E.* × *ferrissii*.

Pteridium aquilinum subsp. **caudatum** (L.) Bonap. [*Pteris aquilina* var. *caudata* (L.) Link]

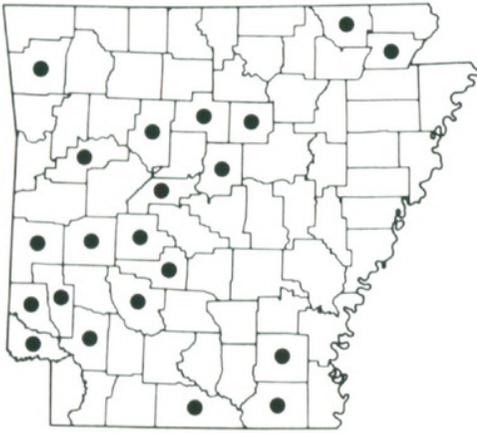
Harvey (1881) listed this taxon as ". . . found all over the southern part of the state . . ." apparently confusing it with var. *pseudocaudatum*. Subspecies *caudatum*, a more southern taxon, is known from the West Indies, Florida, Mexico, Central America, and the coastal regions of northern South America (Tryon, 1941).



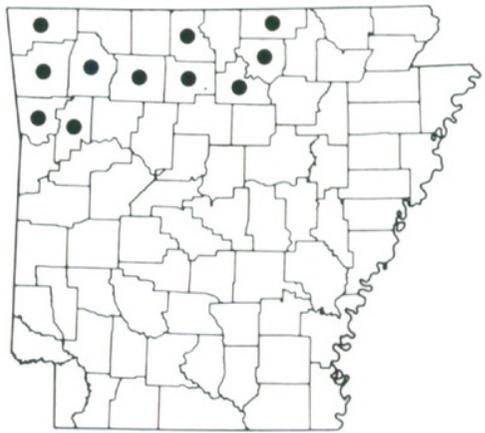
1. *Lycopodium appressum*



2. *Lycopodium lucidulum*



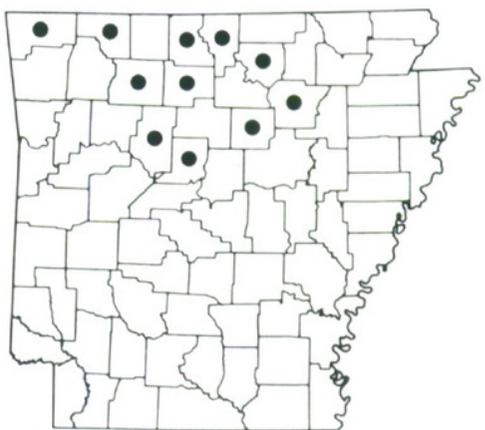
3. *Selaginella apoda*



4. *Selaginella eclipes*



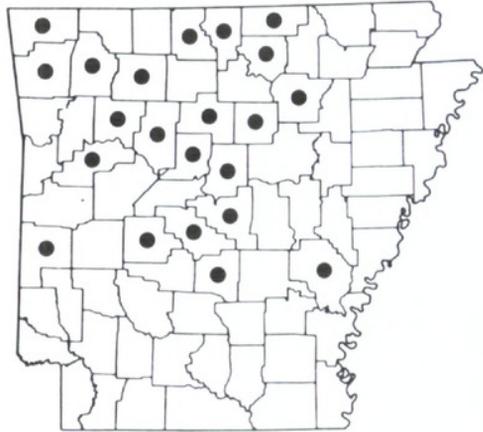
5. *Selaginella riddellii*



6. *Selaginella rupestris*



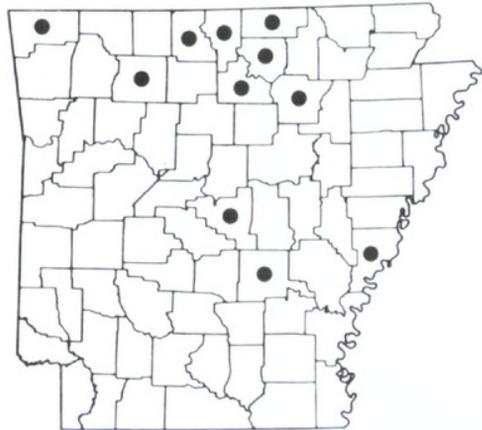
7. *Isoetes butleri*



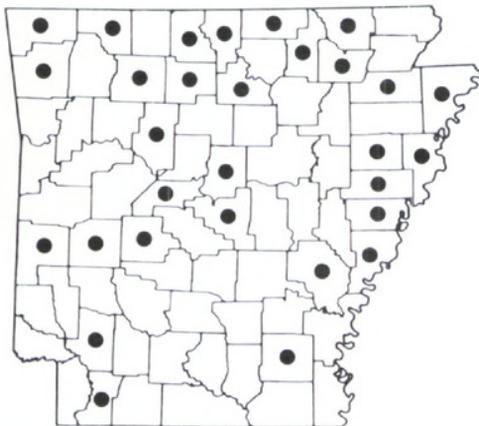
8. *Isoetes melanopoda*



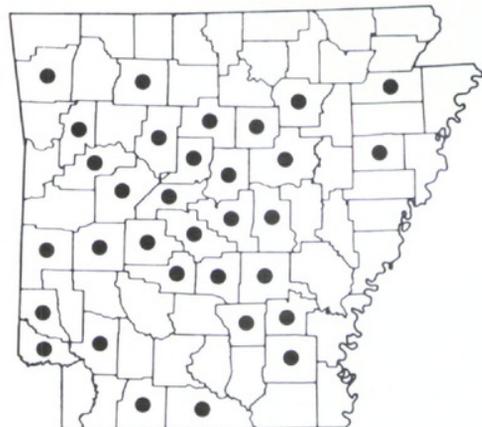
9. *Equisetum arvense*



10. *Equisetum X ferrissii*



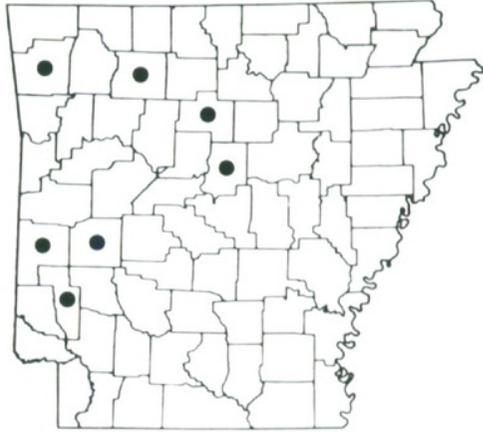
11. *Equisetum hyemale*
var. *affine*



12. *Botrychium biternatum*



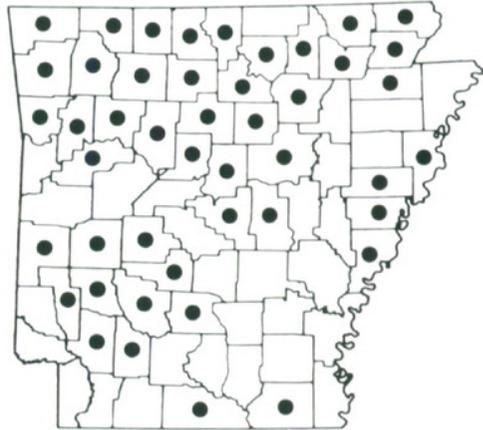
13a. *Botrychium dissectum*
var. *dissectum*



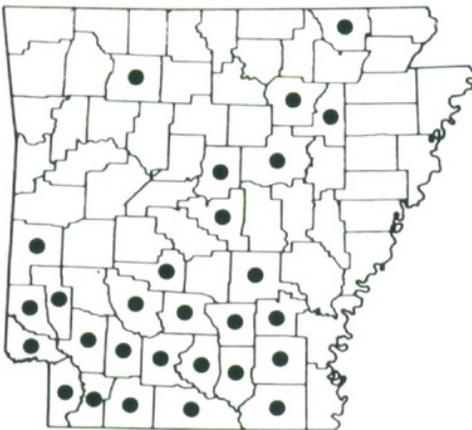
13b. *Botrychium dissectum*
var. *obliquum*



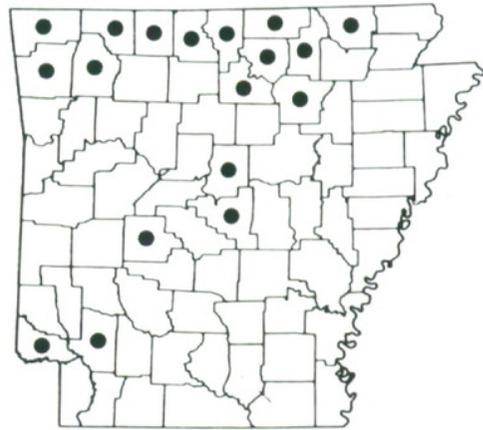
14. *Botrychium lunarioides*



15. *Botrychium virginianum*



16. *Ophioglossum crotalophoroides*



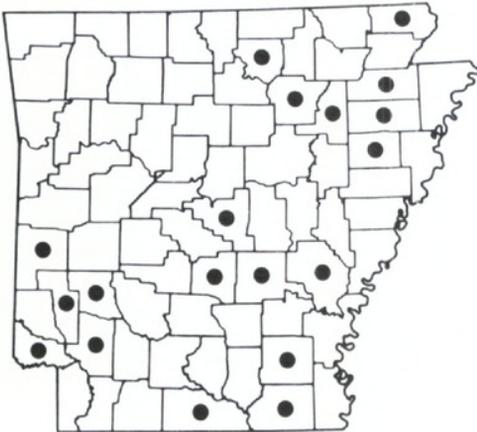
17. *Ophioglossum engelmannii*



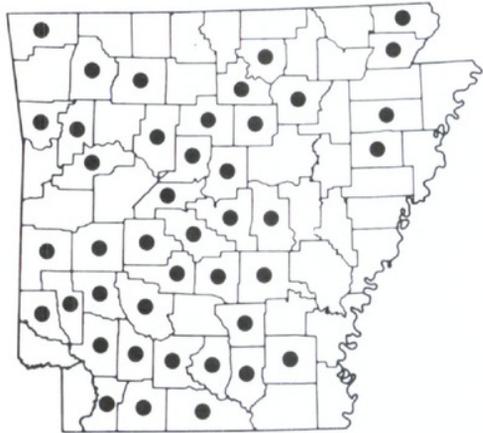
18. *Ophioglossum nudicaule*
var. *tenerum*



19. *Ophioglossum petiolatum*



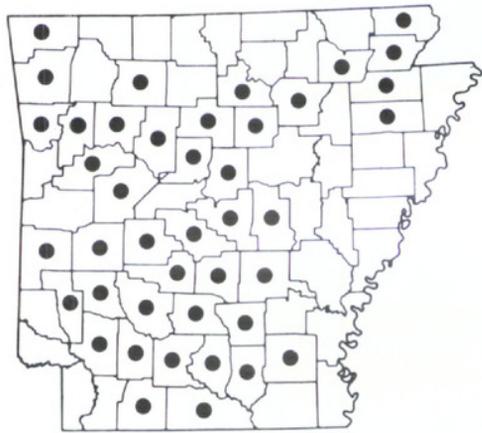
20. *Ophioglossum vulgatum*
var. *pycnostichum*



21. *Osmunda cinnamomea*



22. *Osmunda claytoniana*



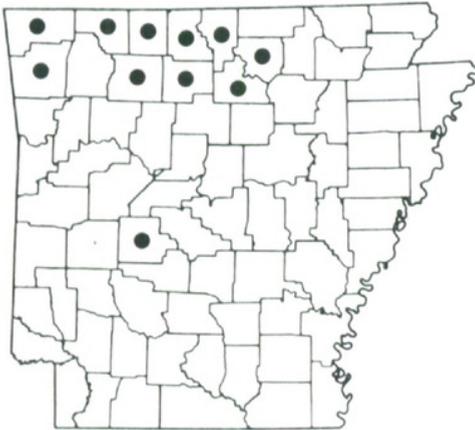
23. *Osmunda regalis*
var. *spectabilis*



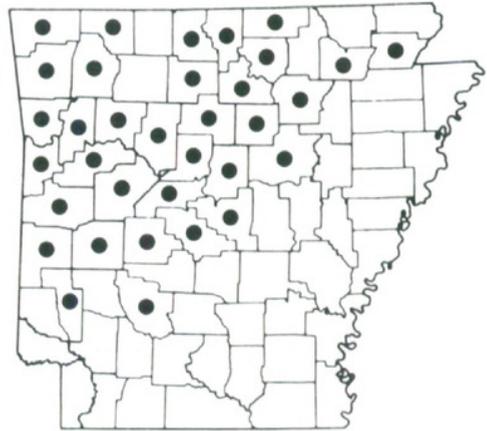
24. *Cheilanthes alabamensis*



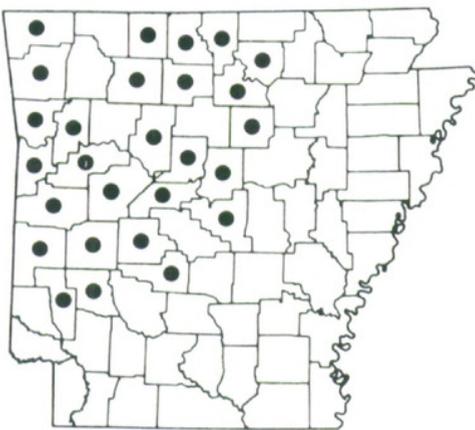
25. *Cheilanthes castanea*



26. *Cheilanthes feei*



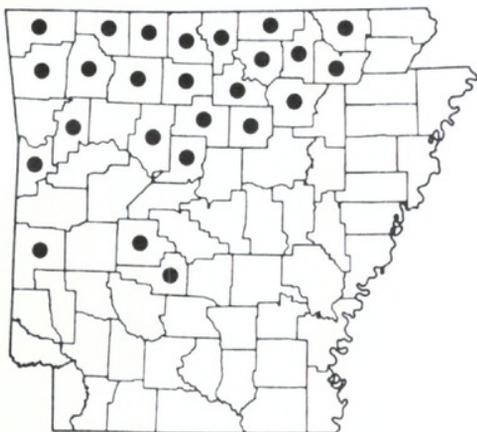
27. *Cheilanthes lanosa*



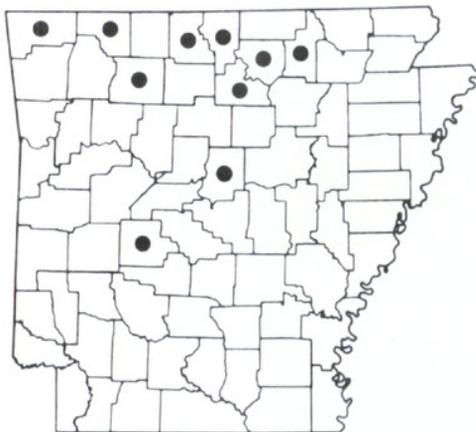
28. *Cheilanthes tomentosa*



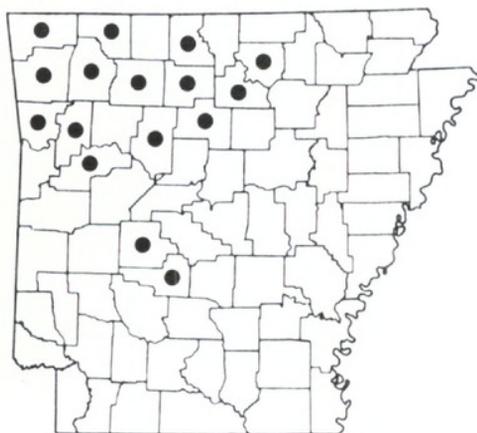
29. *Notholaena dealbata*



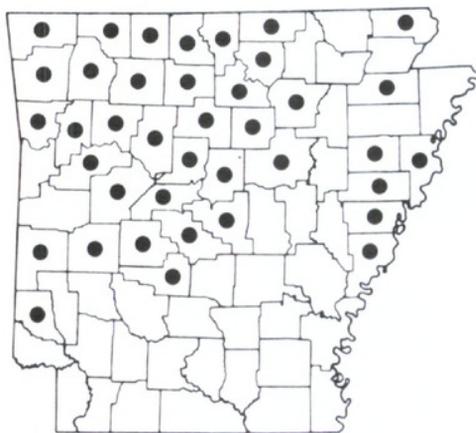
30. *Pellaea atropurpurea*



31. *Pellaea glabella*



32. *Adiantum capillus-veneris*



33. *Adiantum pedatum*



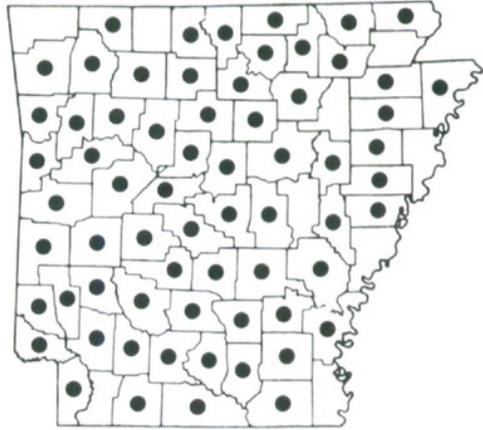
34. *Pteris multifida*



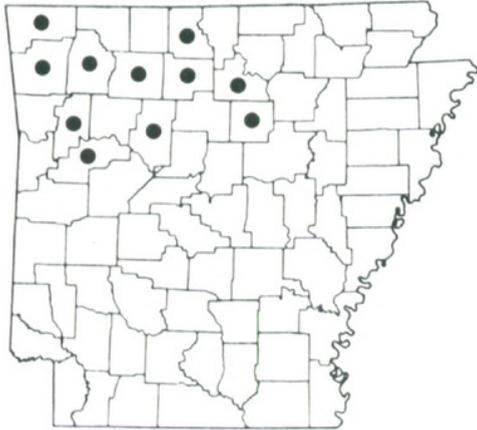
35. *Trichomanes boschianum*



36. *Trichomanes petersii*



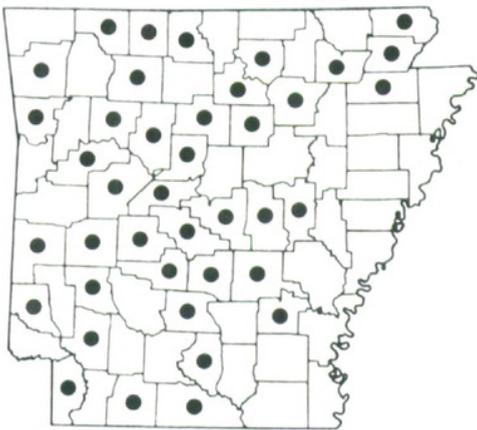
37. *Polypodium polypodioides*
var. *michauxianum*



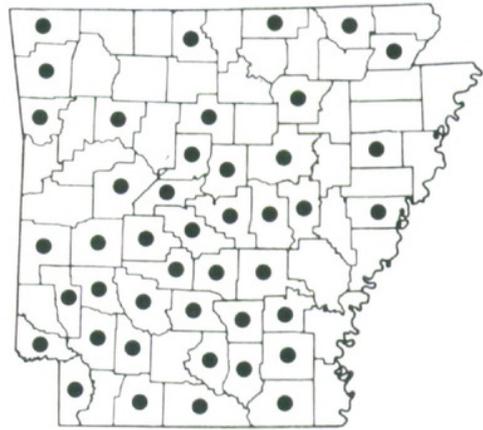
38. *Polypodium virginianum*



39. *Dennstaedtia punctilobula*



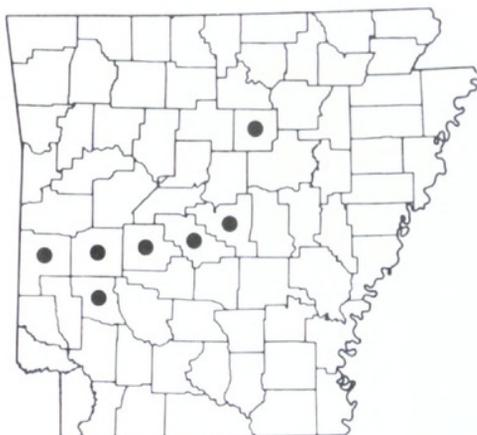
40a. *Pteridium aquilinum*
var. *latiusculum*



40b. *Pteridium aquilinum*
var. *pseudocaudatum*



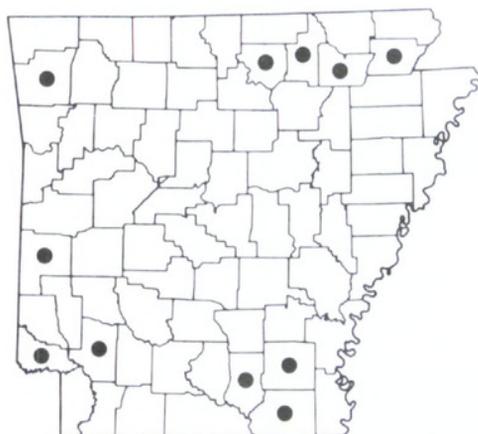
41. *Thelypteris kunthii*



42. *Thelypteris noveboracensis*



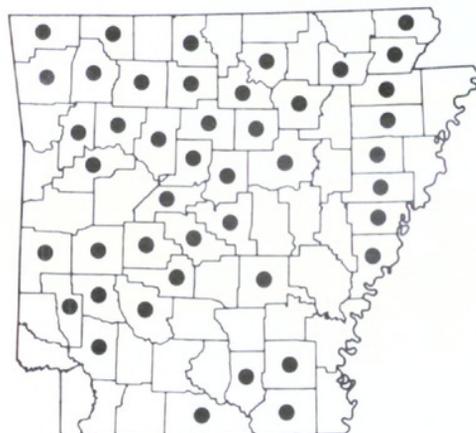
43a. *Thelypteris palustris*
var. *haleana*



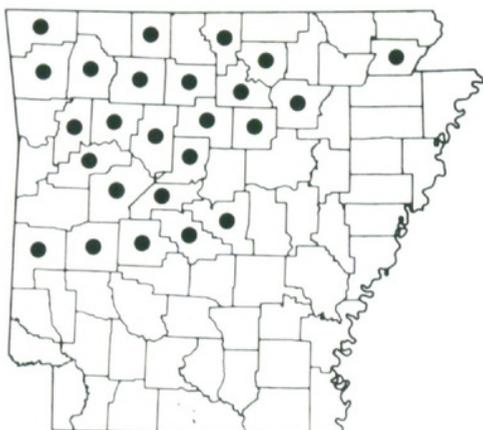
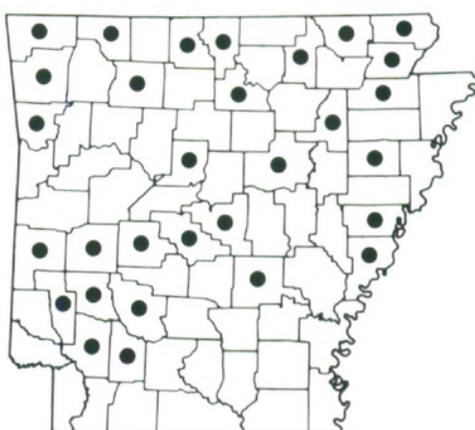
43b. *Thelypteris palustris*
var. *pubescens*

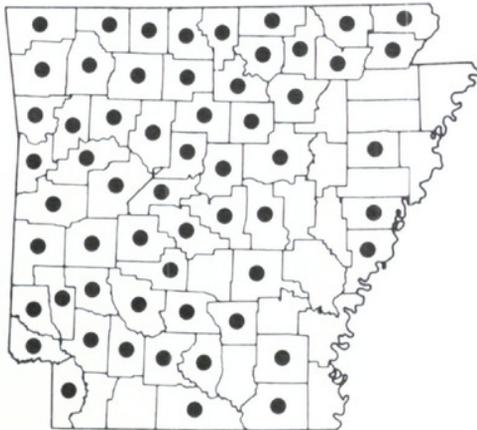


44. *Thelypteris torresiana*

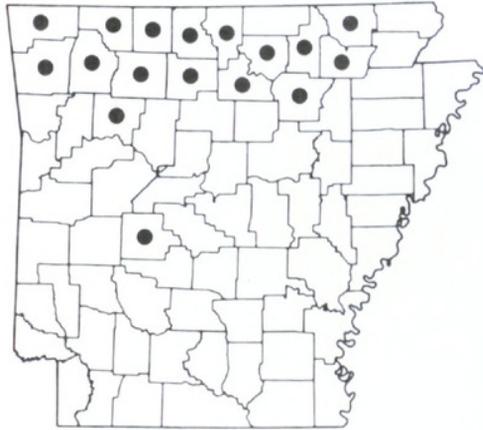


45. *Phegopteris hexagonoptera*

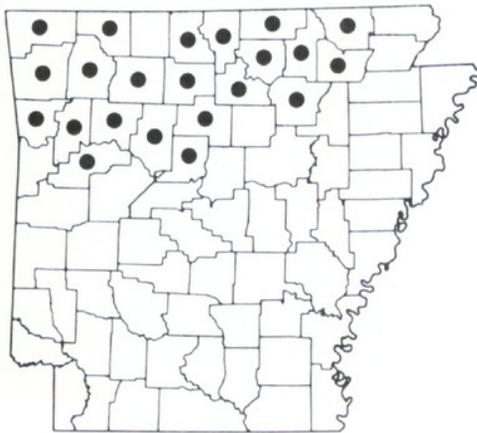
46. *Asplenium bradleyi*47. *Asplenium X ebenoides*48. *Asplenium X kentuckiense*49. *Asplenium pinnatifidum*50a. *Asplenium platyneuron*
var. *bacculum-rubrum*50b. *Asplenium platyneuron*
var. *incisum*



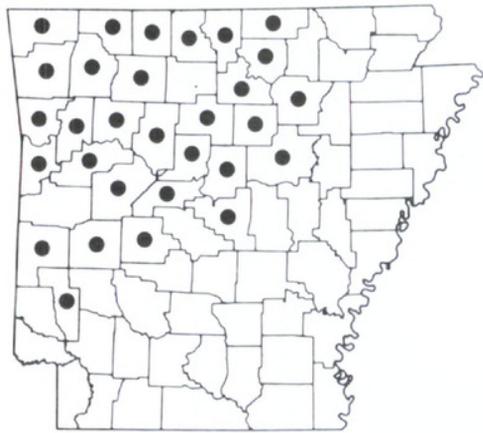
50c. *Asplenium platyneuron*
var. *platyneuron*



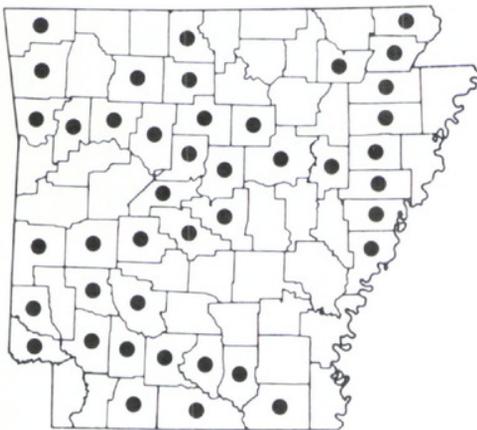
51. *Asplenium resiliens*



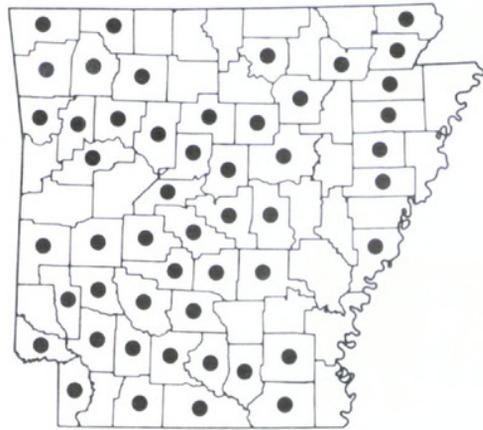
52. *Asplenium rhizophyllum*



53. *Asplenium trichomanes*



54. *Onoclea sensibilis*



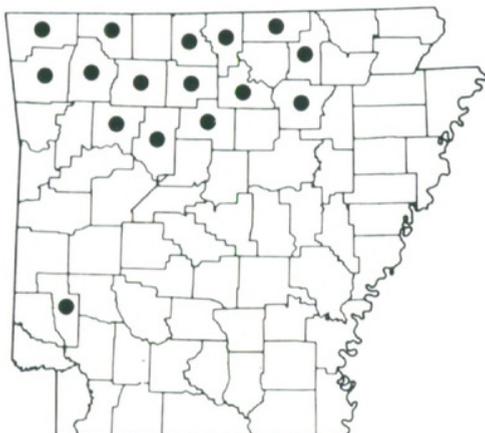
55. *Athyrium filix-femina*
subsp. *asplenioides*



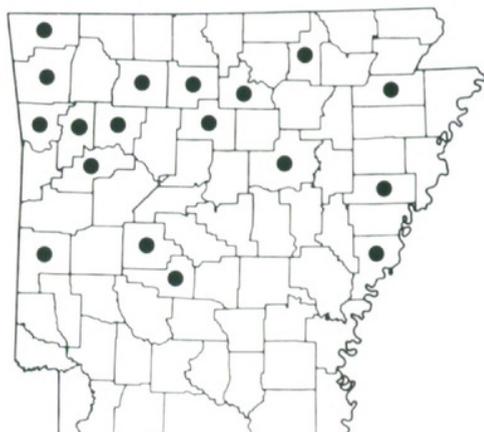
56. *Athyrium pycnocarpon*



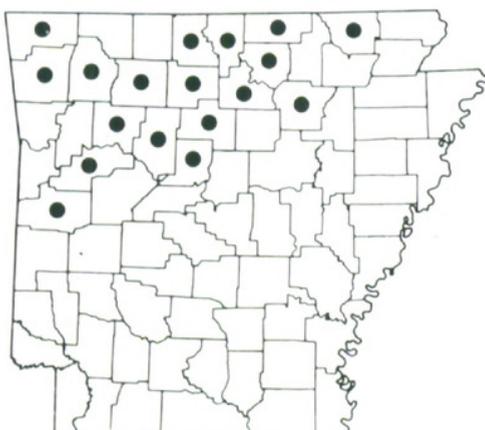
57. *Athyrium thelypteroides*



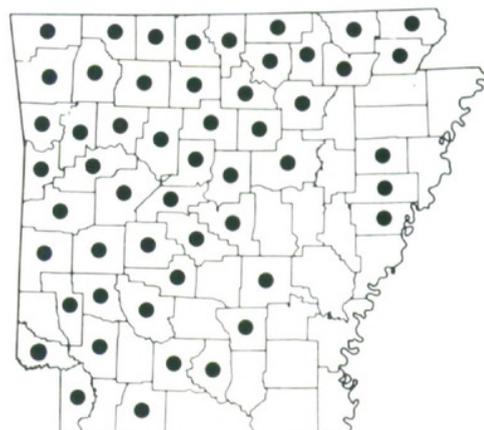
58. *Cystopteris bulbifera*



59. *Cystopteris protrusa*



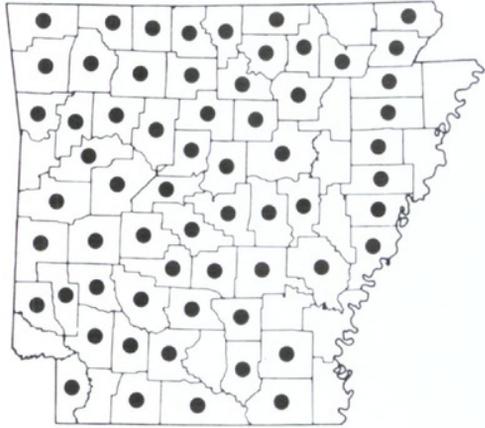
60. *Cystopteris tennesseensis*



61. *Woodsia obtusa*



62. *Woodsia scopulina*
var. *appalachiana*



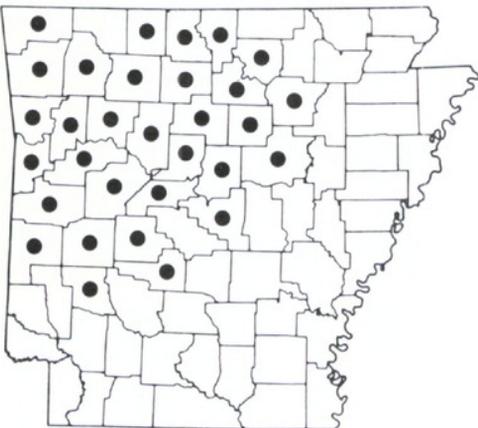
63. *Polystichum acrostichoides*



64. *Dryopteris celsa*



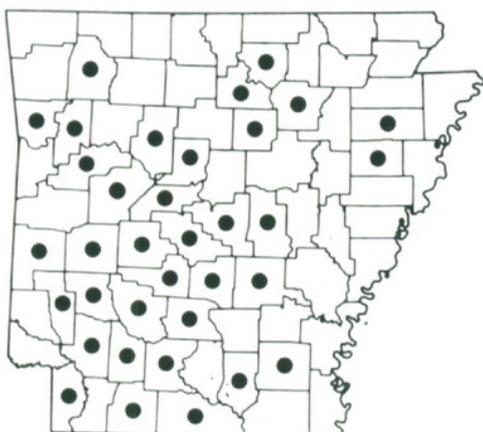
65. *Dryopteris X leedsii*



66. *Dryopteris marginalis*



67. *Dryopteris spinulosa*



68. *Lorinseria areolata*



69. *Woodwardia virginica*



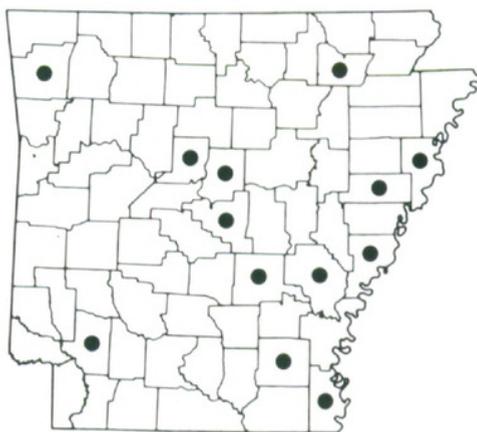
70. *Marsilea uncinata*



71. *Marsilea vestita*
var. *mucronata*



72. *Pilularia americana*



73. *Azolla mexicana*

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LITERATURE CITED

- BOWERS, F., & P. L. REDFEARN, JR. 1967. *Lycopodium lucidulum* in the Boston Mountains of Arkansas. Amer. Fern J. **57**: 91-92.
- BRANNER, J. C., & F. W. COVILLE. 1891. A list of the plants of Arkansas. In: Annual Report of the Geological Survey of Arkansas for 1888. Vol. IV. Press Printing Co., Little Rock.
- BUCHHOLZ, J. T. 1924. Notes on Arkansas pteridophyta. Amer. Fern J. **14**: 33-38.
- _____, & E. J. PALMER. 1926. Supplement to the catalogue of Arkansas plants. Trans. Acad. St. Louis **25**: 91-155.
- BUCK, WILLIAM R. 1977. A new species of *Selaginella* in the *S. apoda* complex. Canad. J. Bot. **55**: 366-371.
- CHANDLER, A. 1941. *Pteris multifida* in Arkansas. Amer. Fern J. **31**: 112.
- CRABBE, J. A., A. C. JERMY, & J. T. MICKEL. 1975. A new generic sequence for the pteridophyte herbarium. Fern Gaz. **11**: 141-162.
- FARRAR, D. R., & P. L. REDFEARN. 1968. *Trichomanes petersii* in the Boston Mountains of Arkansas. Amer. Fern. J. **58**: 32-33.
- FOTI, T. L. 1974. Natural divisions of Arkansas. pp. 11-34 In: Arkansas Department of Planning, Arkansas Natural Area Plan. Little Rock.
- HARVEY, F. L. 1881. Classified list of the ferns of Arkansas with notes on the geographical range and habitat of the species. Bot. Gaz. **6**: 188-190, 213-215.
- HOLMGREN, P. K., & W. KEUKEN. 1974. Index Herbariorum. Part I. The Herbaria of the World. 6th ed. Oosthoek, Scheltema, and Holkema, Utrecht, Netherlands.
- LESQUEREUX, L. 1860. A catalogue of the plants of Arkansas. In: D. D. Owen. Second Report of a Geological Reconnaissance of the Middle and Southern

- Counties of Arkansas Made During the Years 1859 and 1860. C. Sherman & Son, Printers. Philadelphia.
- MOORE, D. M. 1940. Arkansas pteridophyta. *Amer. Fern J.* **30**: 105-119.
- . 1941. Some noteworthy fern communities of Arkansas. *Amer. Fern J.* **31**: 63-71.
- . 1947. Further notes on Arkansas pteridophytes. *Proc. Arkansas Acad.* **2**: 69-70.
- . 1950. A new fern record for Arkansas. *Proc. Arkansas Acad.* **3**: 33-34.
- . 1951. Some new records for the Arkansas flora. *Proc. Arkansas Acad.* **4**: 61-63.
- NUTTALL, T. 1821. *Journal of Travels into the Arkansas Territory During the Year 1819 with Occasional Observations on the Manners of the Aborigines.* Thomas H. Palmer, Philadelphia.
- . 1835. Collections towards a flora of the territory of Arkansas. *Trans. Am. Phil. Soc.* **5**: 139-160.
- PALMER, E. J. 1924. Two interesting ferns from Arkansas. *Amer. Fern J.* **14**: 39-41.
- SCULLY, F. J. 1937. Ferns of Hot Springs National Park and vicinity. *Amer. Fern J.* **27**: 59-62.
- . 1939. Ferns of Hot Springs National Park and vicinity. *Natural History Journal No. 5.* Hot Springs National Park.
- SMALL, J. K. 1938. *Ferns of southeastern states.* Science Press, Lancaster, Pennsylvania.
- SMITH, E. B. 1978. *An atlas and annotated list of the vascular plants of Arkansas.* University of Arkansas, Fayetteville, Arkansas.
- STEYERMARK, J. A. 1963. *Flora of Missouri.* Iowa State University Press, Ames.
- THOMAS, R. D. 1976. The distribution and habitats of seven species of Ophioglossaceae in the southern United States. (Abstr.) page 44 *In: Botanical Society of America Abstracts of Papers.* Allen Press, Inc., Lawrence, Kansas.
- , W. H. WAGNER, JR., & M. R. MESLER. 1973. Log fern (*Dryopteris celsa*) and related species in Louisiana. *Castanea* **38**: 269-274.
- TRYON, R. M. 1941. A revision of the genus *Pteridium*. *Rhodora* **43**: 1-31, 37-67.
- TUCKER, G. E. 1971. *Selaginella arenicola* ssp. *riddellii* in Arkansas. *Sida* **4**: 275.
- WAGNER, W. H., JR. 1962. *Trichomanes boschianum* in Arkansas. *Amer. Fern J.* **52**: 84-85.
- WATERS, CAMPBELL E. 1903. *Ferns.* Henry Holt and Company, New York.
- WHERRY, E. T. 1948. Remarks on the American Lady Ferns. *Amer. Fern J.* **38**: 155-158.

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