

## THE VASCULAR FLORA OF A RIVER BOTTOM IN EAST CENTRAL MISSISSIPPI

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Author's Note: In 1976, this paper, under the title "The Vascular Flora of the Chitlin' Corners Area of Lowndes County, Mississippi," was submitted to *Castanea* for consideration for publication. The paper was rejected, not for deficiencies, but because the journal, in an effort to improve the quality of its content, was no longer publishing floristic checklists. A copy of the manuscript was recently discovered and appears here in basically an unaltered state, other than the nomenclature being updated from 1976 standards to that of USDA, NRCS (2010) and the addition of collection numbers of each species. It is believed that this may be the only record of the flora of the lower portion of the Tombigbee River area of Mississippi prior to the creation of the Tennessee-Tombigbee Waterway and the subsequent raising of the water level. *Phytologia* 92(2): 206-229 (August 2, 2010).

### ABSTRACT

The study area, known locally as "Chitlin' Corners," is located on the west bank of the Tombigbee River in Lowndes County in east central Mississippi. Five hundred and ninety-one species are recorded for this area, prior to the construction the Tennessee-Tombigbee Waterway. Among the more unusual plants for east central Mississippi are *Astragalus distortus*, *Phacelia dubia*, *Carex grayi*, *Opuntia pusilla*, and *Tetragonotheca helianthoides*.

**KEY WORDS:** Mississippi, Lowndes County, Tombigbee River, Tennessee-Tombigbee Waterway, floristics.

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The study area, locally known as “Chitlin’ Corners,” is located on the west bank of the Tombigbee River in the southeast corner of Lowndes County in east central Mississippi. The area includes parts of sections 19, 20, and 28 of Township 20S, Range 19E. Prominent features include the Tombigbee River with its bluffs, mesic woodlands, drainage and swampy areas, oxbow lakes, streams, and oil fields. At the time of the study, there were only a few recreational camps in the area. The major man-made feature was the Southern Natural Gas Pipeline, which crosses the river at this point.

This work comprises the most extensive study of the vascular flora of the Tombigbee River in Mississippi River prior to the now in-progress construction of the Tennessee-Tombigbee Waterway. Since it is not known exactly what changes will accompany the construction and use of the waterway, it is desirable to place on permanent and readily accessible record the results of the study. One previous botanical study was made in the area. Watson and Brown (1967) investigated the arborescent flora, reporting 96 species of trees occurring naturally in the area. The species recorded by Watson and Brown are herein included, with permission, and are annotated by an asterisk.

#### Geology and Topography

Relief in the area is slight, varying between 42-49 meters. Most of the area appears level. The underlying geologic unit is the Mooreville Chalk (Selma Group) of Upper Cretaceous age (Mississippi Geological Society, 1945). Soils are alluvial and consist of fine sands and sandy loams (Watson and Brown, 1967). Most of the area is subject to periodic inundation, especially the low-lying areas and drainages. The major geologic features of interest were the bluffs which drop abruptly about six meters to the river’s edge. In these bluffs, exposed chalk (bedrock) is common. Other features of interest are the oxbow lakes.

#### Plant Community Types

Although relief is slight, marked variation in communities is easily recognized. The following is a listing of the major communities.

*Wooded bluffs:* Wooded bluffs have steep slopes with flat, level tops. Seepage areas are common. Plants include *Fagus grandifolia*, *Tilia* sp., *Liriodendron tulipifera*, *Mitchella repens*, and *Polystichum acrostichoides*. The bluff tops are drier and include *Pteridium aquilinum* var. *pseudocaudatum*, *Aureolaria flava*, *Quercus austrina*, *Crataegus* sp., *Vaccinium* sp., and *Pinus* sp. *Ludwigia decurrens*, *Heliotropium indicum*, *Laportea canadensis*, and *Sagittaria latifolia* are common where the seepage areas meet the river.

*Open bluffs:* These bluffs are practically void of arborescent flora and appear to be scoured by the river and subject to periodic landslides. The sites are dry with chalk exposed in places. Common species include *Ampelopsis arborea*, *Ipomoea* sp., *Xanthium strumarium*, *Eupatorium serotinum*, and *Oenothera biennis*.

*Shrub areas (old fields):* The shrub area provides the most interesting area for study. Typically, the area is level, has sandy soil, is normally dry, and is not often flooded. Characteristic species include *Vaccinium* sp., *Crataegus* sp., *Celtis tenuifolia* var. *georgiana*, *Prunus* sp., *Opuntia pusilla*, and *Yucca filamentosa*. Herbaceous plants include *Rumex hastatulus*, *Gaillardia aestivalis*, *Solidago discoides*, *Conyza canadensis*, *Pseudognaphalium obtusifolium*, and *Cnidocolus stimulosus*.

*Drainages, lowlands, and wet areas:* The areas are periodically inundated and normally moist during most of the year. The topography varies from low-swampy to small ridges that border the low places. Such trees as *Taxodium distichum*, *Carya aquatica*, and *Nyssa aquatica* are common. Other plants include *Smilax* sp., *Berchemia scandens*, *Arisaema dracontium*, and *Saururus cernuus*. On the higher areas that border the low areas, plants such as *Chasmanthium latifolium*, *Carex* sp., *Toxicodendron radicans*, and *Parthenocissus quinquefolia* are common. The more open areas, including some that border on the river, are characterized by *Polygonum lapathifolium*, *Hibiscus laevis*, *Polygonum pensylvanicum*, *Xanthium strumarium*, and *Phyla lanceolata*.

*Woodlands:* Woodlands are found on higher sites. Some slope gently to the river or other low areas. Dominant plants include *Quercus alba*,

*Quercus falcata*, *Carya alba*, and *Prunus serotina*. Other plants include *Euonymus americana*, *Lindera benzoin*, *Galium* sp., *Zizia aurea*, *Thaspium trifoliata*, *Viola affinis*, *Sanicula canadensis*, and *Chasmanthium sessilifolium*.

#### Floristics

The Chitlin' Corners area has a rich vascular flora for east central Mississippi. Some of the more unusual plants found along with comments are listed below.

*Astragalus distortus* and *Phacelia dubia* are of unusual occurrence in Mississippi, both being very common in open areas during March and April. *Carex grayi* is normally found much further north, this probably being the southernmost extent of its range. *Opuntia pusilla* and *Tetragonotheca helianthoides* are typical of the longleaf pine section of Mississippi. Other interesting plants include *Heliopsis helianthoides*, *Stylisma humistrata*, *Stylisma patens*, *Callirhoe triangulata*, *Sida elliotii*, *Menispermum canadense*, and *Melanthera nivea*. Watson and Brown (1967) recorded the following woody species to be of unusual occurrence in east central Mississippi: *Carya pallida*, *Quercus margaretta*, *Quercus incana*, *Quercus laurifolia*, *Celtis tenuifolia*, *Sideroxylon lycioides*, *Quercus texana*, *Prunus caroliniana*, and *Ilex vomitoria*.

Following is a list of the 591 species of plants known to occur in the Chitlin' Corners area. Nomenclature generally follows that of Radford et al. (1968). Species not native to Mississippi are indicated with a section symbol (§). [Names from Watson and Brown (1967) are noted with an asterisk(\*). Collection numbers (all WCH), which follow each species name, were not in the original manuscript.]

The study began April, 1972 and was completed in October 1973. Approximately 30 collecting trips were made. Presently voucher specimens are located at the Northwestern State University Herbarium (NATC), but will eventually be deposited in the personal herbarium of Sidney McDaniel of the Institute for Botanical Exploration, Mississippi State, Mississippi.

#### Pteridophyta Filicopsida

#### Aspleniaceae

*Asplenium platyneuron* (L.) B.S.P. 1048

## Azollaceae

*Azolla caroliniana* Willd. 2045

## Blechnaceae

*Woodwardia areolata* (L.) T. Moore 1186

## Dennstaedtiaceae

*Pteridium aquilinum* (L.) Kuhn var. *pseudocaudatum* (Clute)  
Heller 1052

## Dryopteridaceae

*Onoclea sensibilis* L. 1253

*Polystichum acrostichoides* (Michx.) Schott 902

## Ophioglossaceae

*Botrychium dissectum* Spreng. 1571

*Botrychium virginianum* (L.) Sw. 948, 1072, 1118

## Osmundaceae

*Osmunda regalis* L. 1856

## Polypodiaceae

*Pleopeltis polypodioides* ssp. *polypodioides* (L.) Andrews &  
Windham 901

## Coniferophyta

## Pinopsida

## Cupressaceae

\**Juniperus virginiana* L.

## Pinaceae

\**Pinus echinata* P. Mill.

\**Pinus taeda* L.

## Taxodiaceae

\**Taxodium distichum* (L.) Rich.

## Magnoliophyta

## Liliopsida

## Agavaceae

*Yucca filamentosa* L. 1175

## Alistmataceae

*Sagittaria latifolia* Willd. 1401

## Araceae

*Arisaema dracontium* (L.) Schott 943

## Arecaceae

*Sabal minor* (Jacq.) Pers. 1737

Commelinaceae

- Commelina diffusa* Burm. f. 1139
- Commelina erecta* L. 1165
- Tradescantia ohiensis* Raf. 1021, 1108

Cyperaceae

- § *Bulbostylis barbata* (Rottb.) C.B. Clarke 1512
- Carex abscondita* Mackenzie 1846
- Carex amphibola* Steud. 1050
- Carex bushii* Mackenzie 1020
- Carex caroliniana* Schwein. 964A
- Carex cherokeensis* Schwein. 1722
- Carex crebriflora* Wieg. 1727
- Carex digitalis* Willd. 925
- Carex grayi* Carey 936
- Carex intumescens* 1724
- Carex joorii* Bailey 1882
- Carex lupulina* Muhl. ex. Willd. 1718
- Carex muehlenbergii* var. *muehlenbergii* Schkuhr ex Willd. 1043
- Carex retroflexa* Muhl. ex. Willd. 959
- Carex rosea* Schkuhr ex Willd. *s.n.*
- Carex striatula* Michx. 912
- Carex triangularis* Boeckl. 1732
- Cyperus croceus* Vahl *s.n.*
- Cyperus echinatus* (L.) Wood *s.n.*
- Cyperus erythrorhizos* Muhl. 1420, 1509
- Cyperus pseudovegetus* Steud. *s.n.*
- Cyperus retrorsus* Chapman 1539
- § *Cyperus rotundus* L. *s.n.*
- Cyperus strigosus* L. 1982
- Eleocharis microcarpa* Torr. 1412
- Eleocharis obtusa* (Willd.) J.A. Schultes 997
- Kyllinga brevifolia* Rottb. 1970A
- Scirpus cyperinus* (L.) Kunth 1822
- Scleria triglomerata* Michx. 1736

Dioscoreaceae

- Dioscorea villosa* L. 1117

Iridaceae

- Iris virginica* L. 1865

*Sisyrinchium albidum* Raf. 906A, 961A, 1064

*Sisyrinchium angustifolium* P. Mill. 961

*Sisyrinchium atlanticum* Bickn. 963

Juncaceae

*Juncus coriaceus* Mackenzie 1106

*Juncus dichotomus* Ell. 1107

*Juncus marginatus* Rostk. 1010

*Juncus repens* Michx. 1863

*Juncus tenuis* Willd. 1101, 1202

*Luzula echinata* (Small) F.J. Herm. 935, 2050

Lemnaceae

*Lemna perpusilla* Torr. 982

*Spirodela polyrrhiza* (L.) Schleid. 1859A

Liliaceae

*Allium canadense* var. *canadense* L. 962, 1030

*Allium canadense* var. *mobile* L. (Regel) Ownbey

*Chamaelirium luteum* (L.) Gray 1032

*Hypoxis hirsuta* (L.) 1023

*Lilium michauxii* Poir. 1322, 1870

*Maianthemum racemosum* ssp. *racemosum* (L.) Link 1099

*Manfreda virginica* (L.) Salisb. ex Rose 1365, 1560

*Polygonatum biflorum* (Walt.) Ell. 940, 1049

*Trillium cuneatum* Raf. 910

Poaceae

*Agrostis perennans* (Walt.) Tuckerm. 1655

*Alopecurus carolinianus* Walt. 1022

*Aristida basiramea* Engelm. ex Vasey 1530

*Aristida dichotomas* var. *curtissii* Gray ex S. Wats. & Coult.  
1629

*Aristida lanosa* Muhl. ex Ell. 1528

*Arundinaria gigantea* (Walt.) Muhl. 1033, 1278

§ *Avena sativa* L. 1002

*Cenchrus longispinus* (Hack.) Fern. 1220, 1435

*Cenchrus spinifex* (Cav.) 1521

*Chasmanthium latifolium* (Michx.) Yates. 1197, 1212, 1256

*Chasmanthium sessiliflorum* (Poir.) Yates. 1267, 1297

§ *Cynodon dactylon* (L.) Pers. 1180

*Danthonia sericea* Nutt. 1720

*Dichantherium boscii* (Poir.) Gould & C.A. Clark 1137

- Dichantherium commutatum* (J.A. Schultes) Gould 999, 1056,  
 1097, 1128, 1131, 1618, 1486  
*Dichantherium consanguineum* (Kunth) Gould & C.A. Clark  
 1102, 1122  
*Dichantherium dichotomum* var. *dichotomum* (L.) Gould 1042,  
 1103, 1385  
*Dichantherium laxiflorum* (Lam.) Gould 1012  
*Dichantherium oligosanthes* var. *oligosanthes* (J.A. Schultes)  
 Gould 991, 1056A  
*Dichantherium scabriusculum* (Ell.) Gould & C.A. Clark 1104  
*Dichantherium scoparium* (Lam.) Gould 1029  
*Dichantherium sphaerocarpon* var. *sphaerocarpon* (Ell.)  
 Gould 1098, 1129, 1130  
*Digitaria cognata* var. *cognata* (J.A. Schultes) Pilger 1628  
*Digitaria sanguinalis* (L.) Scop. 1199, 1344, 1423, 1445,  
 1515, 1602  
*Digitaria villosa* (Walt.) Pers. 1409, 1516  
*Danthonia sericea* Nutt. 1720  
*Echinochloa colonum* (L.) Link. 1847  
 § *Echinochloa crus-galli* (L.) Beauv. 1369, 1458  
 § *Eleusine indica* (L.) Gaertn. 1497, 1554  
*Elymus virginicus* L. 1153, 1500  
 § *Eragrostis cilianensis* (All.) Vign. ex Janchen 1201  
*Eragrostis hirsuta* (Michx.) Nees 1414, 1483  
*Eragrostis hypnoides* (Lam.) BSP. 1421  
 § *Eragrostis japonica* (Thunb.) Trin. 1327  
*Eragrostis pilosa* (L.) Beauv. 1424  
*Eragrostis spectabilis* (Purch) Steud. 1303  
*Gymnopogon ambiguus* (Michx.) BSP. 1608  
*Hordeum pusillum* Nutt.  
*Leersia oryzoides* (L.) Sw. 1529  
*Leersia virginica* Willd. 1501  
*Lolium perenne* ssp. *multiflorum* (Lam.) Husnot 1210  
 § *Lolium pratense* (Huds.) S.J. Darbyshire 1105  
*Melica mutica* Walt. 927  
*Panicum anceps* Michx. 1619, 1666, 1672  
*Panicum dichotomiflorum* Michx. 1422, 1490  
*Panicum verrucosum* Muhl. 1418  
*Panicum virgatum* L. 1310, 1368, 1496



- Paspalum boscianum* Flueggé 1590  
*Paspalum floridanum* Michx. 1366, 1448  
*Paspalum fluitans* (Ell.) Kunth 1450  
*Paspalum setaceum* Michx. 1441  
§ *Paspalum urvillei* Steud. 1213, 1390  
*Piptochaetium avenaceum* (L.) Parodi 929, 978  
§ *Poa annua* L. 913  
*Poa autumnalis* Muhl. ex Ell. 1019, 1096  
*Saccharum alopecuroidum* (L.) Nutt. 1413  
*Saccharum brevibarbe* var. *contortum* (Ell.) R. Webster 1517,  
1526  
*Sacciolepis striata* (L.) Nash 1674  
*Schizachyrium scoparium* var. *scoparium* (Michx.) Nash 1477  
*Setaria parviflora* (Poir.) Kerguélen 1138, 1430, 1545, 1658  
*Sorghum halepense* (L.) Pers. 1181  
§ *Sphenopholis filiformis* (Chapman) Scribn. 965  
*Sphenopholis nitida* (Biehler) Scribn. 926  
*Sphenopholis obtusata* (Michx.) Scribn. 1100  
*Sporobolus clandestinus* (Biehler) A.S. Hitchc. 1564  
*Sporobolus junceus* (Beauv.) Kunth 1551, 1610  
*Sporobolus indicus* var. *indicus* (L.) R. Br. 1269, 1526  
*Tridens flavus* (L.) A.S. Hitchc. 1482, 1518, 1670  
*Tridens strictus* (Nutt.) Nash 1057, 1392, 1615  
*Tripsacum dactyloides* (L.) L. 1178  
§ *Triticum aestivum* L. 1004  
*Vulpia octoflora* var. *octoflora* (Walt.) Rydb.
- Smilacaceae
- Smilax bona-nox* L. 1670  
*Smilax rotundifolia* L. 1451  
*Smilax smallii* Morong 1046, 1685  
*Smilax tamnoides* L. 1024, 1044
- Magnoliopsida
- Acanthaceae
- Justicia americana* (L.) Vahl 1026, 1154, 1242A, 1329  
*Ruellia caroliniensis* (J.F. Gmel.) Steud. 1239  
*Ruellia humilis* Nutt. 1251, 1538  
*Ruellia strepens* L. 1077, 1182, 1384
- Aceraceae
- \* *Acer negundo* L.

\* *Acer rubrum* var. *trilobum* Torr. & Gray ex. K. Koch

\* *Acer saccharinum* L.

#### Amaranthaceae

*Amaranthus rudis* Sauer 1403

*Froelichia floridana* (Nutt.) Moq. 1342

*Iresine rhizomatosa* Standl. 1286, 1399, 1449

#### Anacardiaceae

*Rhus copallina* L. 1398

*Rhus glabra* L. 1357

*Toxicodendron pubescens* P. Mill. 985

*Toxicodendron radicans* ssp. *radicans* (L.) Kuntze 1698

#### Annonaceae

*Asimina parviflora* (Michx.) Dunal 1194

\* *Asimina triloba* (L.) Dunal

#### Apiaceae

*Chaerophyllum tainturieri* Hook. 907, 954

*Cicuta maculata* L. 1231

*Cryptotaenia canadensis* (L.) DC. 1086, 1232, 1238

§ *Daucus carota* L. 1127

*Daucus pusillus* Michx. 1088, 1183, 1261

*Eryngium yuccifolium* Michx. 1555

*Ptilimnium capillaceum* (Michx.) Raf. 1148

*Sanicula canadensis* L. 1184

*Spermolepis divaricata* (Walt.) Raf. ex Ser. 1040, 1061

*Thaspium trifoliatum* (L.) Gray 993, 1276, 1284, 1474, 1649

*Trepocarpus aethusae* Nutt. ex DC. 1227, 1294

*Zizia aurea* (L.) W.D.J. Koch 932

#### Apocynaceae (including Asclepidaceae)

*Amsonia tabernaemontana* var. *salicifolia* (Pursh) Woods.  
921, 979, 1050, 1111

*Asclepias tuberosa* L. 1188

*Asclepias variegata* L. 1055, 1542

*Asclepias verticillata* L. 1353

*Matelea gonocarpa* (Walter) Shinnery 1193, 1510

*Trachelospermum difforme* (Walt.) Gray 1880

#### Aquifoliaceae

\* *Ilex ambigua* (Michx.) Torr.

\* *Ilex decidua* Walt.

\* *Ilex opaca* Ait.

\* *Ilex vomitoria* Ait.

Araliaceae

\* *Aralia spinosa* L.

Aristolochiaceae

*Aristolochia tomentosa* Sims 1854

Asteraceae

*Acmella oppositifolia* var. *repens* (Walt.) R.K. Jansen 1983

*Ageratina altissima* var. *altissima* (L.) King & H.E. Robins.  
1678

*Ambrosia artemisiifolia* L. 1464, 1484, 1520

*Ambrosia trifida* L. 1459, 1499

*Antennaria plantaginifolia* (L.) Richards. 2058

*Bidens aristosa* (Michx.) Britt. 1436, 1595

*Bidens bipinnata* L. 1363, 1452, 1491, 1626

*Bidens mitis* (Michx.) Sherff 1473, 1556, 1609

*Boltonia diffusa* Ell. 1229, 1360, 1386

*Brickellia eupatorioides* var. *eupatorioides* (L.) Shinnery  
1488, 1546

*Chrysopsis mariana* (L.) Ell. 1519, 1650, 1652

*Chrysopsis pilosa* Nutt. 1301, 1455, 1561, 1673

*Cirsium discolor* (Muhl. ex Willd.) Spreng. 1205

*Conoclinium coelestinum* (L.) DC. 1203, 1308, 1362

*Conyza canadensis* (L.) Cronq. 1274, 1426, 1624, 1643, 1644

*Coreopsis auriculata* L. 1206

*Coreopsis basalis* (A. Dietr.) S.F. Blake 1060, 1081

*Coreopsis major* Walt. 1190, 1373

*Croptilon divaricatum* (Nutt.) Raf. 1425, 1514, 1625

*Eclipta prostrata* (L.) L. 1283, 1379, 1469

*Elephantopus carolinianus* Raeusch. 1354

*Elephantopus tomentosus* L. 1295, 1364, 1873

*Erechtites hieracifolia* (L.) Raf. ex DC. 1593

*Erigeron philadelphicus* L. 996

*Erigeron strigosus* Muhl. ex Willd. 1045, 1126, 1540

*Eupatorium capillifolium* (Lam.) Small 1574

*Eupatorium serotinum* Michx. 1338, 1475, 1489, 1657

*Eurybia hemispherica* (Alexander) Nesom 1395, 1645, 1899

*Euthamia tenuifolia* var. *tenuifolia* (Pursh) Nutt. 1622

*Fleischmannia incarnata* (Walt.) King & H.E. Robins. 1489A,  
1599, 1679

- Gaillardia aestivalis* (Walt.) H. Rock 1058, 1024, 1136, 1280, 1480, 1523  
*Gamochaeta purpurea* (L.) Cabrera 924, 1014  
*Helenium amarum* (Raf.) H. Rock 1204  
*Helianthus angustifolius* L. 1376  
*Helianthus giganteus* L. s.n.  
*Heliopsis helianthoides* (L.) Sweet 1059, 1079, 1167  
*Heterotheca subaxillaris* (Lam.) Britt. & Rusby 1258, 1456  
*Hieracium gronovii* L. 1244, 1318, 1378, 1479  
*Ionactis linariifolius* (L.) Greene 1607, 1661  
*Iva annua* L. 1591  
*Krigia caespitosa* (Raf.) Chambers 973  
*Krigia virginica* (L.) Willd. 918A  
*Lactuca canadensis* L. 1299  
*Lactuca floridana* (L.) Gaertn. 1507  
*Liatris aspera* Michx. 1841  
*Liatris squarrulosa* Michx. 1332, 1838  
*Melanthera nivea* (L.) Small 1361, 1367, 1375  
*Mikania scandens* (L.) Willd. 1298, 1407, 1527  
*Packera anonyma* (Wood) W.A. Weber & A. Löve 1713  
*Packera glabella* (Poir.) C. Jeffrey 968, 988  
*Pluchea camphorata* (L.) DC. 1394, 1428, 1659  
*Prenanthes altissima* L. 1647  
*Pseudognaphalium obtusifolium* ssp. *obtusifolium* (L.) Hilliard & B.L. Burt 1302, 1405, 1481, 1522, 1550  
*Pyrrhopappus carolinianus* (Walt.) DC. 1080, 1277  
*Rudbeckia hirta* L. 1173  
*Silphium asteriscus* var. *laevicaule* (L.) DC. 1271  
*Silphium radula* Nutt. 1828, 1896  
*Solidago arguta* var. *boottii* (Hook.) Palmer & Steyermark  
*Solidago canadensis* L. 1347, 1437  
*Solidago canadensis* var. *scabra* Torr. & Gray 1335, 1537, 1553, 1643  
*Solidago caesia* L. 1406, 1506  
*Solidago discoidea* Ell. 1305, 1320, 1381, 1487, 1513  
*Solidago odora* Ait. 1511, 1664  
*Solidago ulmifolia* Muhl. Ex Willd.  
*Symphyotrichum concolor* (L.) Nesom 1606

*Symphytotrichum cordifolium* (L.) Nesom 1568, 1572, 1646,  
1680

*Symphytotrichum divaricatum* (Nutt.) Nesom s.n.

*Symphytotrichum ericoides* var. *ericoides* (L.) Nesom 1502

*Symphytotrichum lanceolatum* var. *lanceolatum* (Willd.)  
Nesom 1667

*Symphytotrichum lateriflorum* var. *lateriflorum* (L.) A.&D.  
Löve 1576

*Symphytotrichum patens* var. *patens* (Ait.) Nesom 1562, 1605,  
1653

*Symphytotrichum pilosum* var. *pilosum* (Willd.) Nesom s.n.

*Symphytotrichum racemosum* (Ell.) Nesom 1387, 1493

*Tetragonotheca helianthoides* L. 1119

*Verbesina virginica* L. 1492

*Vernonia gigantea* ssp. *gigantea* (Walt.) Trel. 1255, 1346,  
1498, 1505

*Xanthium strumarium* L. 1465

#### Balsaminaceae

*Impatiens capensis* Meerb. 1831

#### Berberidaceae

*Podophyllum peltatum* L. 1073

#### Betulaceae

\**Betula nigra* L.

\**Carpinus caroliniana* Walt.

*Ostrya virginiana* (P. Mill) K. Koch 1878

#### Bignoniaceae

*Bignonia capreolata* L. 945, 1687

*Campsis radicans* (L.) Seem. ex Bureau 1191

#### Boraginaceae

§ *Heliotropium indicum* L. 1323, 1383

*Myosotis macrosperma* Engelm. 1715

*Onosmodium molle* ssp. *hispidissimum* (Mackenzie) Boivin  
1093

#### Brassicaceae

§ *Arabidopsis thaliana* (L.) Heynh. 918B, 980, 1012

*Arabis laevigata* (Muhl. ex Willd.) Poir. 1084, 1704

§ *Brassica rapa* var. *rapa* L. 906

§ *Brassica juncea* (L.) Czern. 1690

§ *Capsella bursa-pastoris* (L.) Medik. 1697

*Cardamine bulbosa* (Schreb. ex Muhl.) B.S.P 2046

*Cardamine parviflora* L. 914

*Lepidium virginicum* L. 965A, 1039

*Rorippa sessiliflora* (Nutt.) A.S. Hitchc. 923, 1027, 1087,  
1164, 1840

Buddlejaceae

*Polypremum procumbens* L. 1236, 1326

Cactaceae

*Opuntia pusilla* (Haw.) Nutt. 1069, 1078

Campanulaceae

*Lobelia cardinalis* L. 1876

*Lobelia inflata* L. 1897

*Lobelia puberula* Michx. 1675

*Triodanis perfoliata* var. *perfoliata* (L.) Nieuwl. 995

Caprifoliaceae

§ *Lonicera japonica* Thunb. 1016

*Sambucus nigra* ssp. *canadensis* (L.) R. Bolli 1192

\**Viburnum rufidulum* Raf.

Caryophyllaceae

§ *Arenaria serpyllifolia* L. 969, 1066, 1095

*Cerastium glomeratum* Thuill. 915, 920

*Silene stellata* (L.) Ait. f. 1355

*Silene virginica* L. 987

§ *Stellaria media* (L.) Vill. 1708

Celastraceae

*Euonymus americanus* L. 1116

Chenopodiaceae

*Chenopodium album* L. 1218, 1288, 1431, 1476, 1533, 1544,  
1558, 1669

§ *Chenopodium ambrosioides* L. 1447

Cistaceae

*Helianthemum georgianum* Chapman 1159, 1630, 1803

*Lechea mucronata* Raf. 1222

Clusiaceae

*Hypericum drummondii* (Grev. & Hook.) Torr. & Grey 1535

*Hypericum hypericoides* (L.) Crantz 1569

*Hypericum lobocarpum* Gattinger 1265, 1321, 1548

*Hypericum mutilum* L. 1833

*Triadenum tubulosum* (Walt.) Gleason 1440

## Convolvulaceae

- Calystegia sepium* (L.) R. Brown 1196  
*Cuscuta gronovii* Willd. ex J.A. Schultes 1597  
*Dichondra carolinensis* Michx. 1094  
*Ipomoea lacunosa* L. 1151, 1417A  
*Ipomoea nil* (L.) Roth 1417  
*Ipomoea pandurata* (L.) G.F.W. Mey. 1315, 1341  
*Jacquemontia tamnifolia* (L.) Griseb. 1551  
*Stylisma humistrata* (Walt.) Chapman 1230  
*Stylisma patens* ssp. *patens* (Desr.) Myint 1162

## Cornaceae

- \**Cornus florida* L.  
 \**Cornus foemina* P. Mill.

## Crassulaceae

- Penthorum sedoides* L. 1025, 1389, 1655

## Cucurbitaceae

- Cayaponia quinqueloba* (Raf.) Shinnery 1337  
*Sicyos angulatus* L. 1404, 1478

## Ebenaceae

- \**Diospyros virginiana* L.

## Ericaceae

- \**Oxydendrum arboreum* (L.) DC.  
*Rhododendron canescens* (Michx.) Sweet 1031  
*Vaccinium arboreum* Marsh. 960, 1031  
*Vaccinium stamineum* L. 958  
*Vaccinium elliottii* Chapman 1712

## Euphorbiaceae

- Acalypha gracilens* Gray 1532  
*Acalypha rhomboidea* Raf. *s.n.*  
*Chamaesyce maculata* (L.) Small 1216, 1220A, 1388, 1408,  
 1432, 1676  
*Cnidioscolus stimulosus* (Michx.) Engelm. & Gray 992, 1134  
*Croton capitatus* Michx. 1541  
*Croton glandulosus* L. 1215, 1289, 1434, 1563  
*Euphorbia corollata* L. 1109, 1157, 1226, 1275, 1433  
*Euphorbia dentata* Michx. 1330  
*Phyllanthus caroliniensis* Walt. 1620  
*Sebastiania fruticosa* (Bartr.) Fern. 1110  
*Tragia urens* L. 1827

## Fabaceae

- § \**Albizia julibrissin* Durazz.  
*Amorpha fruticosa* L. 1132  
*Amphicarpa bracteata* (L.) Fernald 1312, 1331  
*Apios americana* Medik. 1370  
*Astragalus distortus* Torr. & Gray 916, 937, 1699  
*Baptisia alba* var. *macrophylla* (Larisey) Isely 1734  
 \**Cercis canadensis* L.  
*Chamaecrista fasciculata* var. *fasciculata* (Michx.) Greene  
 1588  
*Chamaecrista nictitans* var. *nictitans* (L.) Moench 1377  
*Clitoria mariana* L. 1113  
*Crotalaria sagittalis* L. 1161  
*Desmodium glabellum* (Michx.) DC. 1438  
*Desmodium glutinosum* (Muhl. ex Willd.) Wood 1279  
*Desmodium nuttallii* (Schindl.) Schub. 1552  
*Desmodium paniculatum* (L.) DC. 1512, 1973  
*Desmodium pauciflorum* (Nutt.) DC. 1158, 1848  
*Dioclea multiflora* (Torr. & Gray) C. Mohr 1120, 1185  
 \**Gleditsia triacanthos* L.
- § *Lepedeza cuneata* (Dum.-Cours.) G. Don 1292  
*Lepedeza stuevei* Nutt. 1336, 1648  
*Mimosa microphylla* Dry. 1082, 1358  
 \**Robinia pseudo-acacia* L.  
*Rhynchosia tomentosa* (L.) Hook. & Arn. 1235, 1319, 1825  
*Senna marilandica* (L.) Link 1870  
*Sesbania herbacea* (P. Mill) McVaugh 1454  
*Strophostyles helvola* (L.) Ell. 1219, 1287  
*Stylosanthes biflora* (L.) B.S.P 1147, 1470  
*Tephrosia spicata* (Walt.) Torr. & Gray 1163, 1264, 1300
- § *Trifolium dubium* Sibthorp 933  
 § *Trifolium lappaceum* L. 1145  
 § *Trifolium resupinatum* L. 1705  
 § *Vicia sativa* ssp. *nigra* (L.) Ehrh. 917, 942  
*Vicia minutiflora* F.G. Dietr. 2059,  
 § *Vicia villosa* var. *varia* (Host) Corb. 1006

## Fagaceae

- \**Castanea dentata* (Marsh.) Borkh.  
 \**Castanea pumila* (L.) P. Mill.



- \**Fagus grandifolia* Ehrh.
- \**Quercus alba* L.
- \**Quercus austrina* Small
- \* *Quercus coccinea* Meunchh.
- \* *Quercus falcata* Michx.
- \* *Quercus incana* Bartr.
- \* *Quercus laurifolia* Michx.
- \* *Quercus lyrata* Walt.
- \* *Quercus margaretta*
- \* *Quercus michauxii* Nutt.
- \* *Quercus muehlenbergii* Engelm.
- \* *Quercus nigra* L.
- \* *Quercus nuttallii*
- \* *Quercus pagoda* (Ell.) Ashe
- \* *Quercus phellos* L.
- \* *Quercus rubra* L.
- \* *Quercus texana* Buckl.
- \* *Quercus shumardii* Buckl.
- \**Quercus stellata* Wangenh.
- \* *Quercus velutina* Lam.

## Geraniaceae

*Geranium carolinianum* L. 998, 1034

## Grossulariaceae

*Itea virginica* L. 1463

## Hamamelidaceae

- \* *Hamamelis virginiana* L.
- \* *Liquidambar styraciflua* L.

## Hippocastanaceae

- \* *Aesculus pavia* L.

## Hydrangeaceae

*Hydrangea arborescens* L. 1155, 1573

## Hydrophyllaceae

*Hydrolea ovata* Nutt. ex Choisy 1872  
*Phacelia dubia* (L.) Trel. 938, 966, 1013, 1700

## Juglandaceae

- \**Carya alba* (L.) Nutt. ex Ell.
- \**Carya aquatica* (Michx. f.) Nutt
- \**Carya carolinae-septentrionalis* (Ashe) Engl. & Graebn.
- \**Carya cordiformis* (Wangenh.) K. Koch

- \**Carya glabra* (P. Mill) Sweet
- \**Carya laciniosa* (Michx. f.) G. Don
- \**Carya ovata* (Mill.) K. Koch
- \**Carya pallida* (Ashe) Engl. & Graebn.
- \**Juglans nigra* L.

## Lamiaceae

- § *Lamium amplexicaule* L. 2056  
*Lycopus virginicus* L. 1895  
*Monarda punctata* L. 1304, 1345, 1468  
*Physostegia virginiana* ssp. *virginiana* (L.) Benth. 1805  
*Prunella vulgaris* L. 1179  
*Pycnanthemum albescens* Torr. & Gray 1874  
*Salvia azurea* Michx. ex Lam. 1549  
*Salvia lyrata* L. 986  
*Scutellaria incana* Biehler 1228  
*Scutellaria integrifolia* L. 1083  
*Scutellaria ovata* Hill 1150  
*Teucrium canadense* L. 1241  
*Trichostema dichotomum* L. 1416, 1494, 1566, 1668

## Lauraceae

- Lindera benzoin* (L.) Blume 1115, 1396  
*Sassafras albidum* (Nutt.) Nees 1875

## Loganiaceae

- Gelsemium sempervirens* 2046  
*Mitreola petiolata* (J.F. Gmel.) Torr. & Gray 1485  
*Spigelia marilandica* L. 1071, 1074

## Lythraceae

- Ammannia coccinea* Rottb. 1324, 1830  
*Lythrum lineare* L. 1832

## Magnoliaceae

- \**Liriodendron tulipifera* L.

## Malvaceae

- Callirhoe triangulata* (Leavenworth) Gray 1090  
*Hibiscus laevis* All. 1400  
*Hibiscus moscheutos* L. 1859  
*Sida elliotii* Torr. & Gray 1543, 1588A  
*Sida spinosa* L. 1504

## Melastomataceae

- Rhexia virginica* L. 1800

## Meliaceae

§ \* *Melia azedarach* L.

## Menispermaceae

*Calycocarpum lyonii* (Pursh) Gray 1140, 1207, 1307

*Cocculus carolinus* (L.) DC. 1260, 1351

*Menispermum canadense* L. 1092

## Molluginaceae

*Mollugo verticillata* L. 1306, 1536

## Moraceae

§ \* *Broussonetia papyrifera* (L.) L'Hér. ex. Vent.

\* *Maclura pomifera* (Raf.) Schneid.

\* *Morus rubra* L.

## Nyctaginaceae

*Mirabilis albida* (Walt.) Heimerl 1146, 1250, 1352

## Nyssaceae

\* *Nyssa aquatica* L.

\* *Nyssa biflora* Walt.

\* *Nyssa sylvatica* Marsh.

## Oleaceae

\* *Chionanthus virginicus* L.

*Forestiera acuminata* (Michx.) Poir. 1871

\* *Fraxinus americana* L.

\* *Fraxinus pennsylvanica* Marsh.

## Onagraceae

*Ludwigia alternifolia* L. 1862, 1839

*Ludwigia decurrens* Walt. 1272A, 1281, 1534

*Ludwigia glandulosa* Walt. 1864

*Ludwigia leptocarpa* (Nutt.) Hara 1328

*Ludwigia repens* J.R. Forst. 1852

*Oenothera biennis* L. 1262, 1293

*Oenothera fruticosa* L. 1263

*Oenothera laciniata* Hill 947, 1037A

*Oenothera rhombipetala* Nutt. ex Torr. & Gray 1037, 1089

*Oenothera speciosa* Nutt. 1035

## Oxalidaceae

*Oxalis grandis* Small 974

*Oxalis stricta* L. 951, 976, 1000, 1003, 1169, 1313, 1429,  
1592

*Oxalis violacea* L. 952, 1683

## Passifloraceae

*Passiflora incarnata* L. 1252

*Passiflora lutea* L. 1660, 1901

## Phrymaceae

*Phryma leptostachya* L. 1356

## Phytolaccaceae

*Phytolacca americana* L. 1075

## Plantaginaceae

*Plantago aristata* Michx. 1143, 1237

*Plantago rugelii* Dcne.

*Plantago virginica* L. 905, 946, 1041

## Plantanaceae

\* *Platanus occidentalis* L.

## Polemoniaceae

*Phlox divaricata* L. 931

*Phlox pilosa* L. 949, 951, 990, 1085

## Polygalaceae

*Polygala grandiflora* Walt. 1142, 1156, 1221

## Polygonaceae

*Brunnichia ovata* (Walt.) Shinn. 1259, 1466

*Polygonum densiflorum* Meisn. 1371

*Polygonum hydropiperoides* Michx. 1208, 1372, 1439, 1644,  
1677

*Polygonum lapathifolium* L. 1171, 1444, 1600, 1823

*Polygonum pensylvanicum* L. 1243, 1290, 1334, 1446

*Polygonum punctatum* Ell. 1503, 1565

*Polygonum virginianum* (L.) Raf. 1254

*Rumex hastatulus* Baldw. 956, 1008

§ *Rumex crispus* L. 1015, 1054

## Portulacaceae

*Claytonia virginica* L. 909, 1682

§ *Portulaca oleracea* L. 1214, 1613

## Primulaceae

*Lysimachia lanceolata* Walt. 1317

## Ranunculaceae

*Clematis crispa* L.

*Clematis reticulata* Walt. 1067, 1209, 1224, 1374

*Delphinium carolinianum* Walt. 1195, 1704

*Ranunculus abortivus* L. 1005, 1047

*Ranunculus hispidus* var. *nitidus* (Chapman) T. Duncan 955,  
975

*Thalictrum thalictroides* (L.) Eames & Boivin 2048

#### Rhamnaceae

*Berchemia scandens* (Hill) K. Koch 1036

*Ceanothus americanus* L. 1121

\**Frangula caroliniana* (Walt.) Gray

#### Rosaceae

*Agrimonia pubescens* Wallr. 1266, 1508

\**Amelanchier arborea* (Michx. f.) Fern

*Crataegus marshallii* Egglest. 1686

*Crataegus monogyna* Jacq. 1701

*Crataegus spathulata* Michx. 1702

*Crataegus flava* Ait. 1706

*Geum canadense* Jacq. 1149, 1233

*Potentilla simplex* Michx. 944, 984, 1135

\**Prunus angustifolia* Marsh.

\**Prunus caroliniana* (P. Mill.) Ait.

\**Prunus mexicana* S. Wats.

\**Prunus serotina* Ehrh.

\**Prunus umbellata* Ell.

*Rubus argutus* Link 967, 994

*Rubus trivialis* Michx. 908, 934

#### Rubiaceae

*Cephalanthus occidentalis* L. 1350

*Diodia teres* Walt. 1217, 1249, 1314, 1348, 1453

*Diodia virginiana* L. 1170, 1246

*Galium aparine* L. 1076

*Galium circaezans* Michx. 1133, 1189

*Galium pilosum* Ait. 1234, 1296

*Galium triflorum* Michx. 954, 1123, 1225

*Galium uniflorum* Michx 1187

*Houstonia longifolia* Gaertn. 1050A

*Houstonia pusilla* Schoepf 939, 971

*Mitchella repens* L. 903, 1114

*Spermacoce glabra* Michx. 1411, 1851

#### Rutaceae

*Ptelea trifoliata* L. 1829

\**Zanthoxylum clava-herculis* L.

## Salicaceae

\**Populus deltoides* Bartr. ex Marsh.\**Salix nigra* Marsh.

## Santalaceae

*Comandra umbellata* (L.) Nutt. 981

## Sapindaceae

*Cardiospermum halicacabum* L. 1460

## Sapotaceae

\**Sideroxylon lycioides* L.

## Saururaceae

*Saururus cernuus* L. 1112

## Saxifragaceae

*Saxifraga virginiensis* Michx. 919

## Scrophulariaceae

*Agalinis purpurea* (L.) Pennell 1472, 135A*Aureolaria flava* (L.) Farw. 1316*Lindernia dubia* (L.) Pennell 1028, 1274, 1282, 1325*Lindernia dubia* (Michx.) var. *anagallidea* Cooperrider 1017*Leucospora multifida* (Michx.) Nutt 1018, 1419*Mecardonia acuminata* (Walt.) Small 1577*Mimulus alatus* Ait. 1272, 1410*Nuttallanthus canadensis* (L.) D.A. Sutton 911, 930, 1144*Pedicularis canadensis* L. 989, 1053*Penstemon digitalis* Nutt. ex Sims 1065, 1141*Scrophularia marilandica* L. 1339§ *Verbascum blattaria* L. 1801§ *Verbascum thapsus* 1247§ *Veronica arvensis* L. 970, 1688*Veronica peregrina* L. 922, 977

## Solanaceae

*Physalis angulata* L. 1442, 1604*Physalis pubescens* L. 1614*Physalis virginiana* P. Mill 1009, 1166, 1333*Solanum americanum* P. Mill 1257*Solanum carolinense* var. *carolinense* L. 1125, 1176

## Symplocaceae

\**Symplocos tinctoria* (L.) L'Hér.

## Tiliaceae

\**Tilia* sp.

## Ulmaceae

- \* *Celtis laevigata* Willd.
- \* *Celtis tenuifolia* Nutt.
- \* *Planera aquatica* J.F. Gmel
- \* *Ulmus alata* Michx.
- \* *Ulmus americana* L.
- \* *Ulmus rubra* Muhl.

## Urticaceae

- Boehmeria cylindrica* (L.) Sw. 1248, 1311
- Laportea canadensis* (L.) Weddell 1291, 1349
- Pilea pumila* (L.) Gray 1461

## Valerianaceae

- Valerianella radiata* (L.) Dufr. 1038

## Verbenaceae

- Callicarpa americana* L. 1211
- Phyla lanceolata* (Michx.) Greene 1177
- Stylodon carneus* (Medik.) Moldenke 1068

## §

- Verbena brasiliensis* Vell. 1391
- Verbena urticifolia* L. 1340

## Violaceae

- Viola affinis* Le Conte 1001
- Viola bicolor* Pursh 904, 972
- Viola walteri* House 941, 983

## Viscaceae

- Phoradendron leucarpum* (Raf.) Reveal & M.C. Johnston  
1684

## Vitaceae

- Ampelopsis arborea* (L.) Koehne 1242
- Ampelopsis cordata* Michx. 1861
- Parthenocissus quinquefolia* (L.) Planch. 1462
- Vitis rotundifolia* Michx. 1091, 1402
- Vitis vulpina* L. 1855

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### LITERATURE CITED

- Mississippi Geological Society. 1945. Geologic Map of Mississippi, Jackson, Mississippi.
- Radford, A. E., H. E. Ahles and C. R. Bell. 1968. Manual of the vascular flora of the Carolinas, University of North Carolina Press, Chapel Hill.
- Watson, J. R., Jr. and E. L. Brown. The arborescent flora of a river bottom in east central Mississippi. *J. Mississippi Acad. Sci.* 13: 17-21. 1967.
- Added Reference: USDA, URCS. 2010. The PLANTS Database (<http://plants.usda>, March 2010, National Data Center, Baton Rouge, Louisiana.