

VASCULAR PLANTS OF SOUTHEASTERN
OKLAHOMA FROM THE SANS BOIS
TO THE KIAMICHI MOUNTAINS

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PREFACE

The author grew up in the prairie region of Kay County where he learned to appreciate proper management of the soil and the native grass flora. After graduation from college, he moved to Eastern Oklahoma State College where he took a position as Instructor in Botany and Agronomy. In the course of conducting Botany field trips and working with local residents on their plant problems, the author became increasingly interested in the flora of that area and of the State of Oklahoma. This led to an extensive study of the northern portion of the Ouachita Highlands with collections currently numbering approximately 4,200. The specimens have been processed according to standard herbarium procedures. The first set has been placed in the Herbarium of Oklahoma State University with the second set going to Eastern Oklahoma State College at Wilburton.

Monographs, revisions and other taxonomic literature of the Oklahoma State University Library were used in the identification of the flora, as well as those of the personal library of U. T. Waterfall and the author.

The listing of taxa in chapter VI follow the Engler-Prantl system for families, as used in the Keys To The Flora of Oklahoma (Waterfall 1966). Genera and subordinate taxa are arranged alphabetically under respective families. The general flowering habitat, normal flowering dates, number of collections and an alphabetical listing of counties where found are given for each species or

subspecific taxon. In a few cases, the symbol fl. denotes flowering and the symbol fr. denotes fruiting dates. Where a species is represented in the herbarium by a worker other than the author, that collection is cited by the collector's last name and collection number in parenthesis following the county in which it was found.

The author wishes to express his appreciation to each member of his committee for their interest shown and guidance given. He is especially grateful to the chairman, Dr. U. T. Waterfall for his patience, continued interest and the use of his personal card index of research literature.

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CHAPTER I

PHYSICAL FEATURES

Location and Area

The area studied is located primarily in the Ouachita Highlands of eastern Oklahoma. The specific area is generally bounded on the west by state highway 2, on the south by the Kiamichi Mountains, on the east by the Oklahoma-Arkansas State line and on the north by the Sans Bois Mountains. The area includes the southern two-thirds of Latimer County, the southern half of LeFlore County and the northeast corner of Pushmataha County.

Most of the area is mountainous with prairie sites lying generally west to east in narrow valleys. One large prairie site lies in northern Latimer County and central LeFlore County, between the Sans Bois and Winding Stair Mountain ranges. A second large valley lies across the southern part of Latimer and LeFlore Counties between the Winding Stair and Kiamichi Mountain ranges.

Geology

The Sans Bois Mountains of northern Latimer and LeFlore Counties are primarily Savanna and McAlester formations of the Krebs group, dating from the Pennsylvanian (Snider 1917). The valleys to the west and east of Wilburton in Latimer County and extending eastward into LeFlore County are alluvium and low terrace deposits underlain by

Pennsylvanian strata (Snider 1917). These valleys are generally associated with Gaines Creek in Latimer County, Fourche Maline Creek in Latimer and LeFlore Counties and Poteau River in LeFlore County. These also are associated with the coal basin of eastern Oklahoma, with numerous coal deposits occurring in the Pennsylvanian strata.

The Ouachita overthrust, forming the Winding Stair Mountain Range, is of Cambrian to Lower Pennsylvanian rocks formed during the second period of mountain formation in eastern Oklahoma (Dott 1928). The leading edge, to the north and west, formed a great arc and is now known as the Choctaw Fault (Dott 1928) running from west to east across central Latimer and LeFlore Counties. The Wapanucka limestone outcrops along this fault through Latimer County and dates to the early Pennsylvanian (Fellows 1964). To the south of the Choctaw Fault lie the Winding Stair Mountains. They are heavily faulted, with alternating layers of sandstones and shales. The principal strata are the Atoka Formation of Pennsylvanian, the Jackfork group of Upper Mississippian, the John's Valley Formation of Upper Mississippian and Lower Pennsylvanian, and the Stanley Shale of Upper Mississippian (Fellows 1964). Characteristically the valleys are formed from shales and the mountains from sandstones. The deeper riverbeds contain belts of Pleistocene materials. The Atoka formation is principally gray shale with sandstones distributed throughout, while the Jackfork group is composed of heavy, massive beds of brown sandstone separated by thinner bands of gray shale (Snider 1917). The Atoka strata are more resistant to erosion than is the Stanley shale. The John's Valley Formation is gray-green clay shale with interbedded sandstone that is easily eroded and is a

valley former (Snider 1917). The Stanley shale is a bluish, greenish-black slaty shale with thin sandstone layers and considerable chert (Snider 1917). Some Caney shale, which is black and green in color, is also present.

The Winding Stair Mountains are separated from the Kiamichi Mountains by a valley through which flows the Kiamichi River. This valley runs from Big Cedar in LeFlore County westward through Talihina, across Latimer County and into Pushmataha County near Clayton. It is formed from the Stanley Shale of Upper Mississippian (Snider 1917), that is easily eroded and forms valley floors.

Lying to the west of Talihina in southeast Latimer County and along the northeastern edge of Pushmataha County are the Potato Hills. They are remnants of Ordovician black shales and sandstones underlain by shales of Lower Pennsylvanian (Snider 1917). At many places the Arkansas Novaculite-Stanley complex is present. The Ordovician consists of bluish, greenish, and white chert with thin cherty and slaty shales with thin lenticels of limestone (Snider 1917). The Kiamichi Mountains are Jackfork sandstone of Pennsylvanian underlain by Stanley shale (Snider 1917). The sandstone is resistant to weathering, the faulting is severe and these mountains are more rugged than the Winding Stair Mountains. Rich Mountain, of southeast LeFlore County is of like composition and is the highest in the area, reaching an elevation of approximately 3000 feet above sea level (Snider 1917), which is approximately 2000 feet above the Streams at its base. The lower elevations in the area are approximately 500 feet above sea level.

Topography by Counties
(Snider 1917)

Latimer County covers approximately 735 sq. miles, lying in an area of Pennsylvanian rocks with the southern part in the Ouachita Mountain region. Both the northern and southern parts consist of alternating sandstones and shales of considerable thickness folded into steep, northeast-southwest folds. The southern formations are the oldest and are steeper.

The northern part is drained by Fourche Maline eastward into the Poteau River; the southern part drains into the Kiamichi River through several small tributaries; and the southwestern part drains northwest into the Canadian River by way of Gaines Creek (Fig. 1).

LeFlore County is one of the larger counties in the state, covering approximately 1,614 sq. miles. The northern part lies in the Arkansas Valley geologic and physiographic province while the southern part lies in the Ouachita Mountains. The formations are the same as those of Latimer County, with the Ouachita Mountains being especially rough. Included are the Winding Stair, Kiamichi and Jackfork Mountains. The middle and northern part drains into the Arkansas River by way of the Poteau River and its tributaries. The southern part drains into the Kiamichi River, which lies north of Kiamichi Mountain. The southern edge, south of Kiamichi Mountain, is drained by Little River toward the Red River.

Pushmataha County covers approximately 1,430 sq. miles. It lies in the Ouachita Mountains except for the southwest corner. The hills are rugged with much surface sandstone, separated by narrow valleys. The Jackfork Mountains and the Potato Hills are the areas of highest

elevation in the county. The eastern part of the county drains toward the Red River by means of Little River. Most of the county is drained toward the Red River by Kiamichi River and its tributaries. The Kiamichi has its origin in Arkansas, flows westward, then southward, then southeast to the Red River. The Kiamichi River is paralleled by Little River to the east, which has its origin in the southwest corner of LeFlore County.

Soils
(Gray & Galloway 1959)

There are four principal soil series within the Ouachita Highlands, with several additional localized series. They are acid Red-Yellow Podzolic soils developed from gray and brown shales and sandstones. The surface soils are generally light colored and strongly leached. The major soil series are the Hector-Pottsville, Enders-Conway-Hector, Atkins-Pope and the Parsons-Dennis-Bates.

South of the Choctaw Fault, much of the mountains are rough with some of the formations steeply tilted (as much as 60 degrees to the horizontal). On these mountains forest vegetation can easily penetrate the more weathered layers of the slopes. The Sans Bois mountains have soils of the same series as the Winding Stair and Kiamichi Mountains, but the strata are more horizontal, which results in poorer forest sites.

The soil association characteristic of the Sans Bois, Winding Stair and Kiamichi Mountain ranges is the Hector-Pottsville series (Fig. 1). In the Hector series the topsoil is a dark brown sandy loam, characteristically formed on hills and mountains under forest type vegetation. In the Pottsville series, topsoil is a brown, fine

sandy loam or loam a few inches deep, formed on hills and mountains under forest vegetation. In both Hector and Pottsville, it is not uncommon for slopes to be steep. Ledges and surface rocks are also a common occurrence.

The soils of the Potato Hills include the Clebit series in addition to the Hector and Pottsville series. The Clebit topsoil varies from a dark gray-brown stony silt loam to a pale brown silt loam, formed under forest vegetation of rocky steep slopes.

The soil of the prairie west of Wilburton, in Latimer County, is the Parson-Dennis-Bates association (Fig. 1). This association also forms part of the prairie north of the Kiamichi River, south and east of Talihina. The Parson topsoil is a grayish brown medium acid silt loam. The topography is nearly level to gentle slopes and is covered by tall grass vegetation. The permeability of the soil is slow, it is seasonally wet and of low fertility. The Dennis series topsoil is dark grayish brown, medium acid silt loam of low fertility and is subject to erosion. The Bates series topsoil is a dark grayish brown loam or fine sandy loam of medium acidity. Shallow spots with surface rock are common and the soil is easily eroded.

The large prairie of eastern Latimer County and northern LeFlore County, north of the Ouachita highlands, is of the Enders-Conway-Hector Association (Fig. 1). The Enders soil is a brown, fine, sandy loam found on gentle slopes and ridges, is of low fertility, erosive and droughty. The Conway series is a brown silt loam. Parent material is gray and brown clay and sandy shales of gentle slopes and valleys. It is of low fertility, slow draining and commonly

has silt mounds. The Hector series, which is a part of this association has been previously discussed on page 5.

The Poteau River valley has soils of the Atkins-Pope Association (Fig. 1). The Atkins series is a light gray acid silt loam or gray loam mottled with brown and yellow. The parent materials are gray acid mottled clay loams and loams and loamy alluviums. The terrain is flood plains, subject to overflow and is of low fertility with poor drainage. The Pope soil is a brown acid fine sandy loam. Parent materials are brown stratified alluviums of flood plains and naturally elevated dikes. It is subject to overflow, is of low fertility, but is sandier and better drained than the Atkins.

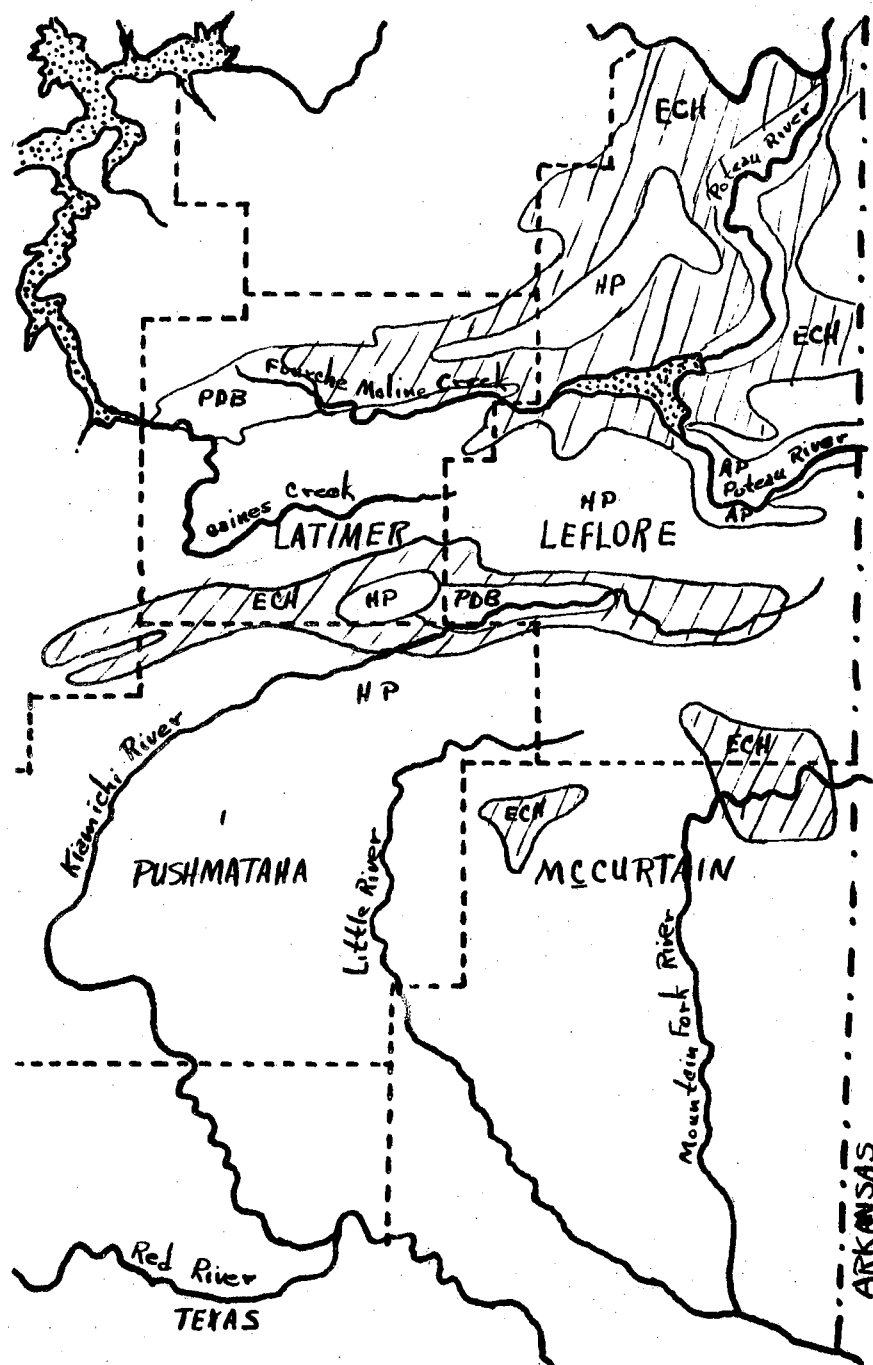


Figure 1. Generalized soil map of southeastern Oklahoma. Symbols are: PDB - Parson, Dennis, Bates; ECH - Enders, Conway, Hector; HP - Hector, Pottsville; and AP - Adkins, Pope.

Source: Soils of Oklahoma by Gray and Galloway 1959.

CHAPTER II

CLIMATE

The climate of the Ouachita Highlands is of the continental type. It is moderated by seasonal influences of warm moist winds from the Gulf of Mexico. The annual temperature extremes range from a few degrees below zero to 103° F. The average temperature for the years 1962 through 1967 was approximately 62° F. (Table I).

Precipitation is high, ranging from just under 40 inches in the northern part to nearly 50 inches in the southern mountainous part (Table II). During the relatively dry year of 1963, just over 20 inches fell at Wilburton, whereas in 1967 over 62 inches fell at the Kiamichi Tower on Kiamichi Mountain in southwest LeFlore County (Table II).

The distribution of rainfall is more uniform over the entire year than is usual for the rest of Oklahoma. Spring is characterized by heavy rainfall resulting in considerable local flooding. The summer months often become droughty with moisture again being plentiful during the fall. Eastern Oklahoma and the adjoining states receive, on the average, more precipitation in the spring than any other state east of the Rocky Mountains (Wahlgren 1941).

High summer temperatures usually occur with clear skies and are accompanied by light wind. In winter occasional sleet, ice storms or snows occur, but are few in number and of short duration. The

last killing frost in spring falls in March to late April, with the first frost in fall occurring in late October.

TABLE I
AVERAGE TEMPERATURES

Station	1962	1963	1964	1965	1966	1967
Clayton 2N	—	—	63.3M	—	—	—
Kiamichi Tower	—	—	—	—	—	—
Poteau	62.3	63.1	62.5	62.0	60.9	62.1
Smithville 2NNW	60.5	60.9	—	—	—	60.1M
Wilburton	62.2	63.4	62.5	62.4M	59.7M	—
Wister Dam	63.1	63.7	63.3	63.8M	60.4M	60.7

Source: U.S. Dept. of Commerce, Weather Bureau, Climatological Data, Oklahoma, Annual Summaries, 1962-1967. The data was taken from the yearly averages reported for the years 1962 through 1967. Temperature averages followed by an M indicate one or more months of missing data.

TABLE II

AVERAGE PRECIPITATION

Station	1962	1963	1964	1965	1966	1967
Clayton 2N	48.5	29.4E	50.4	36.0E	37.0E	53.8E
Kiamichi Tower	59.0E	28.0E	45.4	58.2E	44.1E	62.1
Poteau	41.8	20.9	38.6	31.6	33.1	49.6
Smithville 2NNW	51.3	29.7	43.5	56.9	39.2E	59.2
Wilburton	45.7	20.7	41.9	35.7	45.9	48.8E
Wister Dam	38.7	22.0	40.3	32.6	36.9	50.5

Source: U.S. Dept. of Commerce, Weather Bureau, Climatological Data, Oklahoma, Annual Summaries, 1962-1967. The data was taken from yearly averages for the years 1962 through 1967. Averages followed by an E indicate one or more months of missing data.

CHAPTER III

TAXONOMIC HISTORY

The first plant collecting in the Ouachita Highlands of Eastern Oklahoma was done by Thomas Nuttall in 1819. During a stay of several weeks at Ft. Smith, on the Arkansas River in western Arkansas, he made several short collecting trips into surrounding territory. On May 16, 1819, Nuttall left Ft. Smith with a Major Bradford and a company of soldiers on a trip to the confluence of the Kiamichi River and the Red River. They followed the Poteau and Kiamichi Rivers, crossing the mountains that separate the two drainage systems.

The following are excerpts from Nuttall's Journal of his Travels into the Arkansas (Arkansas Territory as reprinted in Early Western Travels, Volume XIII. Thwaites 1905).

[April] 27. Yesterday I took a walk of about five miles up the banks of the Pottoe [Poteau], and found my labour well repayed by the discovery of several new or undescribed plants... The whole expanse of forest, hill and dale was now richly enamelled with a profusion of beautiful and curious flowers; among the most conspicuous was the charming Daisy of America Astranthium integrifolium (Michx.) Nutt. of a delicate lilac colour, and altogether corresponding in general aspect with the European species; intermingled, appears a new species of Phlox, the Verbena aubletia, and the esculent Scilla Camassia.

Nuttall made interesting notes about the terrain and flora. After passing the Poteau river he noted the conic shape of Sugar Loaf Mountain and Cavanah Mountain, likening them to the Allegheny Mountains (Thwaites 1905). On May 17, he recorded the following:

These vast plains, beautiful almost as the fancied Elysium, were now enamelled with innumerable flowers, among the most splendid of which were the azur Larkspur /Delphinium carolinianum Walt./, gilded Coreopsides /Coreopsis/, Rudbeckias /Rudbeckia/, fragrant Phloxes, and the purple Psilotria.

After crossing the divide from the Poteau River to the Kiamichi River, he again likened the ridges to the Allegheny of Pennsylvania, noting that they were rocky and thinly wooded with pines and oaks (Thwaites 1905).

On his return trip to Ft. Smith, Nuttall notes passing with great difficulty along the summit of a mountain covered with thickets of "dwarf oaks (Quercus chinquapin, Q. montana and Q. alba), none of them scarcely exceeding the height of a man." (Thwaites 1905).

Many other botanists traveled and collected plants in Oklahoma. Zina Pitcher, a surgeon in the U. S. Army, apparently traveled the same general route as did Nuttall (McKelvey 1955). Melines C. Leavenworth, Heinrich Karl Beyrich, Charles Joseph Latrobe and Edward James all collected in Oklahoma but passed by the Ouachita highlands, while enroute to more western or southern destinations. (McKelvey 1955).

G. D. Butler collected Isoetes at Limestone Gap, approximately 70 miles north of Texas and 100 miles west of Arkansas (Butler 1878). This is probably the present town of Gap in northern Atoka County, situated in a break of the Ouachita highlands.

Stevens collected plants from the vicinity of Page, Oklahoma in Southeastern Oklahoma during 1913 prior to his and Shannon's joint publication of plant life in Oklahoma (Stevens and Shannon 1917).

Palmer (1924) made a study of the ligneous flora of Rich Mountain

in Southeastern Oklahoma and Featherly (1928) lists the grasses of Oklahoma. In addition, occasional collections from the area of study by E. Little, R. Stratton and G. Goodman are in the herbarium of Oklahoma State University. Collections of significance include those of U. T. Waterfall.

CHAPTER IV

ECOLOGICAL CONSIDERATIONS

The vegetation of the Ouachita Highlands is the Oak-hickory Association of the Deciduous Forest Formation (Bruner 1931). This Association is composed of two communities that are similar and intergrade considerably. One community is the upland forests of the rough hills and mountainous areas and the other is the lowland forest of stream valleys and more mesic lower slopes. Overlapping into the forests, primarily in the valleys, is the tall grass prairie. There is intergradation to a limited extent between the lowland forests and the prairie community.

The oak-hickory forest is most extensive on the lower slopes and level fertile valleys. The dominant species are: Quercus Shumardii, var. Schneckii, Q. nigra, Q. falcata, var. falcata, Q. velutina, Q. Stellata, Carya aquatica, C. cordiformis, C. myristicaeformis and C. texana. Other species commonly present in the valleys and lower slopes include Acer saccharum, A. saccharinum, A. negundo, Diospyros virginiana, Sassafras albida, Liquidambar styraciflua, Juglans nigra, Prunus serotina, Robinia pseudoacacia, Nyssa sylvatica, Ostrya virginiana, Tilia neglecta, Quercus macrocarpa, Q. Muhlenbergii, Q. lyrata, Q. alba, Ulmus alata, Carya illinoensis, Celtis laevigata, Pinus echinata, Salix caroliniana, S. nigra, Platanus occidentalis, Gleditsia tricanthos, Fraxinus americana, Maclura pomifera and

Salix interior.

Characteristic dominant species of the more xeric upland sites include Quercus velutina, Q. stellata, Q. palustris, Q. marilandica, Carya cordiformis, C. texana, Ulmus alata and Pinus echinata. Other species, including shrubs, present in the upland forest include the following: Aesculus glabra, Ascyrum hypericoides, Vaccinium arboreum, V. stamineum, Bumelia lanuginosa, Ceanothus herbaceus, Hypericum spathulatum, H. punctatum, Ilex decidua and Rhus copallina. Shrubs more characteristic of the more mesic lower slopes include Crataegus crus-galli, C. spathulata, Cornus Drummondii, C. obliqua, Prunus mexicana, P. americana, Rhus Toxicodendron, R. glabra, R. radicans and Virburnum prunifolium.

Shrubs of the mesic lower slopes and valleys include Cornus florida, Alnus serrulata, Betula nigra, Ostrya virginiana, Carpinus caroliniana, Callicarpa americana, Hamamelis vernalis, Prunus serotina, Amorpha fruticosa, Hydrangea arborescens and Asimina triloba. Magnolia acuminata is found only on the mesic northern slope of Rich Mountain in southeast LeFlore County. Ilex opaca is restricted to wet sandy loam soils along Kiamichi River and Little River.

Common lianas found in the Oak-hickory Association include the following: Clematis versicolor, Calycocarpum Lyoni, Cocculus carolinus, Vitis rotundifolia, V. vulpina, V. acerifolia, V. aestivalis, Parthenocissus quinquefolia, Menispermum canadense, Ampelopsis cordata, Berchemia scandens, Cissus incisa, Smilax glauca, S. bona-nox, S. rotundifolia, Rhododendron oblongifolium, and Campsis radicans.

The herbaceous flora varies with the seasons and the density of the forest. The prevernal and vernal species include the following:

Sanguinaria canadensis, Podophyllum peltatum, Polygonatum canaliculatum, Arisaema dracontium, Erythronium americanum, Danthonia spicata, Panicum sphaerocarpon, Carex brevior, C. caroliniana, C. lurida, Trillium viride, Viola pedata, var. lineariloba, V. sororia, V. Kitaibeliana, Valerianella longiflora, V. stenocarpa, Ranunculus hispidus, R. Fascicularis, Antennaria plantaginifolia, Senecio obovatus, Oenothera laciniata, Anemonella thalictroides, Lepidium virginianum and Callirhoe alcaeoides.

Common estival species include the following: Silene stellata, Salvia lyrata, Monarda fistulosa, Teucrium canadense, Geum canadense, Tovara virginiana, Boehmeria cylindrica, Utrica chamaedryoides, Commelina communis, Polygonum hydropiperoides, var. opelousanum, Rumex crispus, R. Pulcher, Froelichia gracilis, Tephrosia virginiana, Zizia aurea, Cassia fasciculata, Clitoria mariana, Desmondium sessilifolium, Elymus canadensis, Panicum hians, Eleocharis obtusa, Lobelia spicata and Passiflora incarnata.

The serotinal species include the following: Lobelia cardinalis, Aster azureus, Boltonia diffusa, Elephantopus carolinianus, Eupatorium coelastinum, E. serotinum, Iresine rhizomota, Impatiens capensis, Agastache nepetoides, Helianthus hirsutus, Uniola latifolia, Tridens flavus, Croton monanthogynus, Euphorbia corollata, E. supina, Pycnanthemum albescens, Prunella vulgaris, Plantago rugelii, Coreopsis grandiflora and Solidago delicatula.

Subclimax prairie is found between the Winding Stair Mountains and the Sans Bois Mountains, and between the Kiamichi Mountains and the Winding Stair Mountains.

Dominant prairie species are as follows: Andropogon gerardi, A. scoparius, Sorghastrum nutans, and Panicum virgatum. Other common species include Andropogon saccharoides, A. ternarius, Setaria geniculata, Echinochloa crusgalli, Panicum anceps, P. agrostoides, var. condensatum, Paspalum setaceum, Agrostis hyemalis, Aristida oligantha, Spehnopholis obtusata, Tridens strictus, Carex amphibola, var. turgida, C. lupuliformis, Scirpus lineatus, Aristida longespica, Elymus virginicus, Manisuris cylindrica, Eragrostis trichodes, Bromus secalinus, Festuca octaflora, and Hordeum pussillum.

Prevernal and vernal species of the prairies include the following: Sisyrinchium campestre, Hypoxis hirsuta, Tradescantia ohiensis, T. Ernestiana, Baptisia leucophaea, B. Nuttallina, B. sphaerocarpa, Collinsia violacea, Ranunculus fascicularis, Bromus japonicus, B. mollis, Penstemon arkansanus, P. Digitalis, Claytonia virginica, Anemone caroliniana, Linaria canadensis, Camassia angusta and Luzula bulbosa.

Species that are a little later but still vernal include Daucus pusillus, Ptilimnium Nuttallii, Potentilla canadensis, Amsonia Tabernaemontana, Phacelia hirsuta, Astranthium integrifolium, Phlox pilosa, Psoralea psoralioides, P. tenuiflora, Silene stellata, Astragalus distortus, Rosa carolina, Stylosanthes biflora, Polygala incarnata, Acalypha virginica and Verbena canadensis.

Estival species of the prairie include Rudbeckia grandiflora, Cicuta maculata, Rudbeckia triloba, Asclepias tuberosa, Oenothera laciniata, Zizia aurea, Eryngium yuccifolium, Gaura filiformis, Liatris pycnostachya, Spiranthes vernalis and Cuscuta cuspidata.

Some serotinal species of the prairie include Solidago radula, S. rigida, Helianthus mollis, Vernonia Baldwinii, Silphium laciniatum and Euphorbia nutans.

Vegetation associated with the streams, ponds and lakes of the area varies from free floating aquatics to those growing along the edge of water. Common free floating or bottom rooted species include Nuphar advena, var. advena, Lemna valdiviana, Myriophyllum heterophyllum, Utricularia biflora, Potamogeton diversifolius and Najas guadalupensis. Species rooted at the edge of the water include Typha latifolia, Sagittaria gramineum, S. ambigua, Zizaniopsis miliacea, Hydrolea ovata, Justicia americana, Polygonum pennsylvanicum, P. Persicaria, Ludwigia palustris, Eleocharis obtusa, E. quadrangulata, Rhynchospora corniculata and various species of Carex.

CHAPTER V

RANGE EXTENSIONS AND SPECIES OF SPECIAL INTEREST

This chapter covers range extensions and species having a rather restricted distribution in the area studied.

Range Extensions

BIDENS ARISTOSA (Michx.) Britt. var. MUTICA (Gray) Gattinger, reported by Waterfall (1954a) for McCurtain County, was collected in early October (Means 2837) near Lake Nahih Wayia in Pushmataha County and (Means 2210) in the Poteau River valley 5 mi. south of Poteau in LeFlore County.

CAREX LACTEBRACTEATA Waterfall, a new species described by Waterfall (1954b) with the TYPE (Waterfall 11380) from a rocky wooded ridge 16.4 mi. north of Broken Bow, in McCurtain County; it was collected May 1968 by the author (3252) on rocky wooded hillsides of Cucumber Creek in LeFlore County, approximately 22 miles north of the original collection site.

Species of Special Interest

PINUS TEADA L., although occurring in large stands in southeast McCurtain County, was collected (Means 2499) as an occasional tree of mixed hardwood forest of Kiamichi River valley approximately 2 miles southeast of Tuskahoma, in Pushmataha County

in October.

TAXODIUM DISTICHUM (L.) Richard, collected in August, 1965 (Means 2066) and early April, 1966 (Means 2403) in shallow water along the banks of Poteau River near an old home site in LeFlore County. Reproduction has occurred.

BUCHLOE DACTYLOIDES (Nutt.) Engelm., common further west in the grasslands, collected (Means 1521) on clay site along creek $1\frac{1}{2}$ mi. east of the Latimer-LeFlore County line along Highway 270 in LeFlore County in early June, 1965.

CYNOSURUS ECHINATUS L., naturalized from Europe; collected (Means 2597) in open woods on a rocky hillside near a stream 1 mi. south of Clayton in Pushmataha County, in early June, 1968.

XYRIS TORTA J. E. Smith, var. OCCIDENTALIS Malme, collected (Waterfall 10547) in a slew 1.1 mi. west of Talihina in Latimer County, October 14, 1951.

POPULUS DELTOIDES Marsh., although fairly common in central and western Oklahoma, collected (Means 2361) at the base of wooded north slope of a ridge north of Eastern Oklahoma State College at Wilburton in Latimer County, April 5, 1966.

BRASENIA SCHREBERI Gmel., abundant in upper end of Lake Nanih Wayia, June 16, 1968 (Means 3608) in Pushmataha County and less commonly in a farm pond 2 mi. east of Buffalo Valley School July 13, 1968 (Means 3790) in southeastern Latimer County.

MAGNOLIA ACUMINATA L., reported by Palmer (1924) as occurring on the lower north slopes of Rich Mountain in LeFlore County; collected in June 1932 (Stevens 2771), June 1968 (Means 3553) and May 1968 (Means 3279) only at that site, approximately $\frac{1}{2}$ mi. west of

the Arkansas border in early June.

ASIMINA TRILOBA (L.) Dunal, indicated as common near Page, Oklahoma by Palmer (1924), collected in fruit (Means 790) in the wooded valley of Cucumber Creek in LeFlore County, August 17, 1963.

DROSERA ANNUA Reed, collected (Barclay and Doty sin. num.) May 1961, on sides of low mounds in prairie along Highway 2 (approximately 4 mi. north of Clayton) in Pushmataha County.

SEDUM NUTTALLIANUM Raf., collected May 23, 1966 (Means 2453) from rather dense stand on a wet weather seep at the edge of a blue shale outcrop along the highway, approximately 1.2 mi. west and .7 mi. north of Tuskahoma in Pushmataha County.

RIBES CYNOSBATI L., reported by Palmer (1924) from Rich Mountain, collected (Means 2507) from mixed hardwood forest of Kiamichi River valley $\frac{1}{2}$ mi. south and $1\frac{1}{2}$ mi. east of Tuskahoma in Pushmataha County, May 22, 1966 and (Means 2893) from the rocky north slope of Kiamichi Mountain 1 mi. south of Big Cedar in LeFlore County April 15, 1967.

ANDRACHNE PHYLLANTHOIDES (Nutt.) Coulter, occasional shrubby plant of rock-strewn small streams, collected (Means 3656) along edge of small rocky stream 1 mi. northwest of Albion in Pushmataha County, June 30, 1968. Also collected (Waterfall 8542) along rocky stream west of Talihina October 11, 1964 and (Waterfall 17171) along a rocky stream 9 mi. north of Tuskahoma August 9, 1948, both in Latimer County.

ILEX OPACA Ait., collected (Means 1408) May 26, 1965 and (Means 2436) April 22, 1966 in deep sandy soil of Kiamichi River

valley 0.7 mi. south of Big Cedar (Clark 350) May 3, 1935 and (Stevens 1406) April 1914 in wooded valley near Page (Means 3220) in Little River valley 6 mi. southeast of Nashoba, May 27, 1968 and (Sellers sin. num.) July 16, 1966 9 mi. northwest of Clayton in Pushmataha County.

PROSERPINACA PALUSTRIS L., var. CREBRA Fern. & Grisc., collected (Means 3585) in a stream 1 mi. south of Clayton in Pushmataha County, June 16, 1968.

MYRIOPHYLLUM PINNATUM (Walt.) BSP., collected (Means 3401) in shallow water of Fourche Maline Creek 4 mi. south of Red Oak in Latimer County, May 28, 1968.

LIATRIS ELEGANS (Walt.) Willd., collected (Means 3944) 26 August 1968 and (Waterfall 147) July 31, 1932 in native prairie west of Albion in Pushmataha County, (Stratton 604) September 1927 and (Waterfall 15173) October 11, 1958 in prairies east of Wilburton in Latimer County.

RUDBECKIA MAXIMA Nutt., collected (Means 1507) from a wet prairie site 1 mi. west of Red Oak in Latimer County, June 16, 1965.

CHAPTER VI

TAXA, HABITATS AND DISTRIBUTION

OSMUNDACEAE

OSMUNDA

O. REGALIS L., var. SPECTABILIS (Willd.) Gray; woods and thickets; April. Counties: Latimer (Featherly sin. num.) and LeFlore (Featherly sin. num.).

POLYPODIACEAE (Correll 1956)

ADIANTHUM

A. PEDATUM L.; wooded slopes and valleys; May through July; 2 sheets. Counties: LeFlore and Pushmataha (Stratton 4844).

ASPLENIUM

A. PINNATIFIDUM Nutt.; moist ledges, bluffs and rocky slopes; April. County: Latimer (Stratton 2561).

A. PLATYNEURON (L.) Oakes; moist woods and valleys; April through September; 1 sheet. Counties: Latimer (Stratton 2562), LeFlore (Stevens 2710) and Pushmataha.

ATHYRIUM

A. FILIX-FEMINA (L.) Roth., var. ASPLENIOIDES (Michx.) Farw.; moist ravines and valleys; June through September; 1 sheet. County: LeFlore.

CHEILANTHES

C. LANOSA (Michx.) C. C. Eat.; wooded slopes, ledges or rocky soil; April through October; 2 sheets. Counties: Latimer and LeFlore (Stevens 2776).

C. VESTITA (Spreng.) Swartz; rocky slopes and ledges; June through October; 2 sheets. Counties: LeFlore and Pushmataha.

CYSTOPTERIS
(McGregor 1950)

C. FRAGILIS (L.) Bernh., var. SIMULANS (Weatherby) McGregor; rocky slopes, wooded valleys and wooded slopes; June through August; 2 sheets. Counties: Latimer (Featherly sin. num.), LeFlore and Pushmataha.

DRYOPTERIS

D. MARGINALIS (L.) Gray; woods, rocky slopes; June through October; 3 sheets. County: LeFlore.

PELLAEA
(Tryon 1957)

P. ATROPURPUREA (L.) Link, var. ATROPURPUREA; rocky slopes and ledges; April through July; 2 sheets. County: Latimer.

POLYPODIUM

P. POLYPODIOIDES (L.) Watt., var. MICHAUXIANUM Weatherby;
clings to tree trunks and limbs or on ledges; April through June;
1 sheet. Counties: Latimer (Wallis 7525), LeFlore (Hopkins 2916),
and Pushmataha.

POLYSTICHUM

P. ACROSTICHOIDES (Michx.) Schott.; wooded valleys and rocky
slopes; March through July; 4 sheets. Counties: Latimer, LeFlore
and Pushmataha.

PTERIDIUM
(Tryon 1941)

P. AQUILINUM (L.) Kuhn, var. PSEUDOCAUDATUM (Clute) Heller;
open woods, thickets and clearings; summer. Counties: Latimer
(Hopkins 1679), LeFlore (Stevens 2715) and Pushmataha (Waterfall
172).

WOODSIA

W. OBTUSA (Spreng.) Torr.; rocky woods, ledges and wooded
valleys; late May through August; 5 sheets. Counties: Latimer,
LeFlore and Pushmataha.

PINACEAE

JUNIFERUS

J. VIRGINIANA L.; rocky hillsides, creek and river valleys;
June through October; 5 sheets. Counties: Latimer, LeFlore and

Pushmataha.

PINUS
(Harlow 1931)

P. ECHINATA Mill.; thin to densely wooded slopes and stream valleys; August through September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. TAEDA L.; deep soil of river valleys; May through September 1 sheet. County: Pushmataha.

TAXODIUM

T. DISTICHUM (L.) Richard; shallow water of river; August; 2 sheets from Poteau River near ruins of old home; probably introduced although smaller trees downstream indicate reproduction has occurred. County: LeFlore.

TYPHACEAE

TYPHA
(Hotchkiss 1949)

T. ANGUSTIFOLIA L.; shallow water, edges of lakes and streams; June through August; 4 sheets. Counties: Latimer and Pushmataha.

T. DOMINGENSIS Pers.; shallow streams and edges of lakes; June through July; 2 sheets. County: Pushmataha.

T. LATIFOLIA L., forma LATIFOLIA; edges of lakes, small streams and ditches; June through September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

SPARGANIACEAE

SPARGANIUM
(Fernald 1922)

S. AMERICANUM Nutt.; shallow water of creeks, ponds and lakes;
June through August. County: LeFlore (Blakley 1449).

ZOSTERACEAE

POTAMOGETON
(Fernald 1932 and Ogden 1945)

P. DIVERSIFOLIUS Raf.; streams and lakes; May through August;
5 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. PULCHER Tuckerm.; spring fed streams; May through July;
2 sheets. Counties: LeFlore and Pushmataha.

NAJADACEAE

NAJAS

N. GUADALUPENSIS (Spreng.) Magnus; farm ponds and lakes; May
through September; 3 sheets. Counties: Latimer, LeFlore and
Pushmataha.

ALISMATACEAE

ALISMA

A. PLANTAGO-AQUATICA L., var. PARVIFLORUM (Pursh) Torr.; muddy

banks and shallow water of small streams and ponds; June through August; 1 sheet. County: Latimer.

ECHINODORUS

E. CORDIFOLIUS (L.) Griseb.; shallow water of ponds and streams; July through October; 1 sheet. County: Pushmataha.

SAGITTARIA

S. AMBIGUA T. G. Smith; farm ponds and lakes; June through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. GRAMINEA Michx.; standing water and boggy banks of streams and ponds; April through October; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. LATIFOLIA Willd., var. OBTUSA (Muhl.) Wieg.; shallow water of streams and lakes; July through October; 1 sheet. County: Latimer.

S. PLATYPHYLLA (Engelm.) J. G. Smith; swamps, ponds and creek floodplains; June through October; 2 sheets. Counties: LeFlore and Pushmataha (Love 149).

GRAMINEAE (Hitchcock and Chase 1950)

AGROSTIS

A. ALBA L.; meadows, pastures and damp thickets (introduced); June through September; 1 sheet. County: LeFlore.

A. ELLIOTTIANA Schultes; fields, waste places and open areas; April through early June; 1 sheet. Counties: Latimer and

LeFlore (Ball 340).

A. HYEMALIS (Walt.) BSP.; dry or open waste places, bogs or thin woods; March through June; 12 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. PERENNANS (Walt.) Tuckerm.; woods and thickets; late June through October. County: LeFlore (Ball 406).

AIRA

A. ELEGANS Willd.; open ground, thin soils; May and early June; 3 sheets. Counties: LeFlore and Pushmataha.

ALOPECURUS

A. CAROLINIANA Walt.; old fields, ditches and low ground; April and May. County: LeFlore (Ball 324).

ANDROPOGON

A. BARBINOIDES Lag.; rocky slopes and open ground; May through August; 1 sheet. County: Latimer.

A. ELLIOTTII Chapm.; dry woods, waste places, fields and poor meadows; September through November; 1 sheet. Counties: Latimer and Pushmataha (Waterfall 11222).

A. GERARDI Vitman, var. GERARDI; prairies, swales and dry open ground; June through September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. SACCHAROIDES Swartz; prairies, rocky slopes, waste areas and valleys; late May through October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. SCOPARIUS Michx.; prairies, open woods and fields; August through October; 2 sheets. Counties: LeFlore and Pushmataha.

A. TERNARIUS Michx.; sandy soil, open woods, prairie and low lands; September through October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. VIRGINICUS L., var. ABBREVIATUS (Hack.) Fern. & Grisc. (including var. CORYMBOSUS); open ground and old fields; September through October. County: LeFlore (Ball 494).

A. VIRGINICUS L., var. VIRGINICUS (including var. HIRSUTIOR); open ground, old fields, overgrazed prairie and moist sites; September through October; 3 sheets. Counties: LeFlore and Pushmataha.

ARISTIDA

A. DICHOTOMA Michx., var. CURTISSII Gray; overgrazed prairies and open ground; October. County: LeFlore (Ball 467).

A. DICHOTOMA Michx., var. DICHOTOMA; open ground, disturbed prairies and wooded hillsides; October; 1 sheet. Counties: LeFlore (Ball 460) and Pushmataha.

A. LONGESPICA Poir.; disturbed sites at edge of woods and prairies; September through mid October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. OLIGANTHA Michx.; old fields, overgrazed prairie and disturbed woodland sites; August through October; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. PURPURASCENS Poir.; old fields, disturbed forest sites and edge of prairie sites; October; 1 sheet. Counties: Latimer and

LeFlore (Ball 492).

ARUNDINARIA

A. GIGANTEA (Walt.) Muhl.; low woods, creek banks and moist lowlands; March through mid May. County: LeFlore (Gates sin. num.).

AXONOPUS

A. AFFINUS Chase.; rocky hillsides, disturbed prairies and open woods; September through October; 1 sheet. Counties: Latimer (Ensey 742) and Pushmataha.

BOUTELOUA

B. CURTIPENDULA (Michx.) Torr.; prairies, rocky hills and open woods; mid June through October; 2 sheets. Counties: Latimer and LeFlore.

BRACHIARIA

B. PLATYPHYLLA (Griseb.) Nash; open ground, creek banks and sandy soils; August through October; 1 sheet. County: Pushmataha.

BRACHYELYTRUM

B. ERECTUM (Schreb.) Beauv.; moist or rocky woods; June through August. County: LeFlore (Ball 603).

BROMUS

B. CATHARTICUS Vahl.; wooded slopes, waste places and old fields (introduced); April and May; 5 sheets. Counties: Latimer and LeFlore.

B. INERMIS Leyss.; prairies, creek banks (introduced); May and June; 1 sheet. County: LeFlore.

B. JAPONICUS Thunb.; thin hillside soils, river banks and prairies; mid May through June; 11 sheets. Counties: Latimer, LeFlore and Pushmataha.

B. MOLLIS L.; prairies, stream banks and old fields; May and early June; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

B. PURGANS L.; moist woods, rocky slopes and river banks; May through July; 2 sheets. Counties: Latimer and LeFlore.

B. SECALINUS L.; thin soil, prairies and old fields (introduced); May; 2 sheets. Counties: Latimer and LeFlore.

B. TECTORUM L.; rocky hillsides, disturbed sites and old fields; late April and May; 4 sheets. Counties: Latimer and LeFlore.

BUCHLOE

B. DACTYLOIDES (Nutt.) Engelm.; open ground and clay soils; May and June; 1 sheet. County: LeFlore.

CENCHRUS

C. INCERTUS M. A. Curtis; prairies, open fields and woods; July through September; 1 sheet. County: Latimer.

C. PAUCIFLORUS Benth. (incl. C. ALBERTSONII and C. LONGISPINUS Fern.); sandy soil and old fields; June through October. County: LeFlore (Ball 497).

CHLORIS

C. VERTICILLATA Nutt.; native prairies and disturbed sites;
May through October; 2 sheets. Counties: Latimer and LeFlore.

C. VIRGATA Swartz.; open ground, old fields and disturbed sites;
August through October; 1 sheet. County: LeFlore.

CINNA

C. ARUNDINACEAE L., var. INEXPANSA Fern. and Grisc.; creek
valleys, edges of lakes and moist deep soil; August through mid
October; 2 sheets. Counties: Latimer, LeFlore (Ball 392) and
Pushmataha.

CYNOSURUS

C. ECHINATUS L.; open ground, and wooded stream banks
(introduced); June; 1 sheet. County: Pushmataha.

DACTYLIS

D. GLOMERATA L.; fields, meadows and wooded hillsides
(introduced); May; 1 sheet. County: LeFlore, Rich Mountain area.

DANTHONIA

D. SPICATA (L.) Beauv., var. LONGIPILA Scribn. and Merr.;
wooded hillsides, prairies and river banks; May through June;
7 sheets. Counties: Latimer, LeFlore and Pushmataha.

DIARRHENA

D. AMERICANA Beauv., var. OBOVATA Gleason; wooded mountain

slopes and valleys; mid July through mid September; 1 sheet.

County: LeFlore.

DIGITARIA

D. FILIFORMIS (L.) Koel., var. VILLOSA (Walt.) Fern.; disturbed sites and open woods; September through October. County: LeFlore (Ball 440).

D. ISCHAEMUM (Schreb.) Muhl.; old fields and waste places (introduced); July through October. County: LeFlore (Ball 423).

D. SANGUINALIS (L.) Scop.; fields, creek valleys and waste places; June through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

D. VIOLASCENS Link; sandy soil of hillsides and river valleys; August through October. Counties: LeFlore (Ball 379) and Pushmataha (Waterfall 10513).

ECHINOCHLOA

E. COLONUM (L.) Link, forma COLONUM; moist areas and creek valleys; August through October; 1 sheet. County: LeFlore.

E. COLONUM (L.) Link, forma ZONALIS (Guss.) Wieg.; moist disturbed sites; August through September. County: LeFlore (Ball 418).

E. CRUSGALLI (L.) Beauv. (incl. E. PUNGENS and E. ZELAYENSIS); creek valleys, prairies and moist disturbed sites; June through October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

ELEUSINE

E. INDICA (L.) Gaertn.; open woods, fields and disturbed prairies; June through September; 2 sheets. Counties: LeFlore and Pushmataha.

ELYMUS
(Fernald 1933)

E. CANADENSIS L., forma CANADENSIS; prairies and deep soils of valleys; June and July; 3 sheets. Counties: Latimer, LeFlore (Ball 358) and Pushmataha.

E. CANADENSIS L., forma GLAUCIFOLIUS (Muhl.) Fern.; prairies, open woods and fertile valleys; May through July; 2 sheets. Counties: LeFlore and Pushmataha.

E. INTERRUPTUS Buckl.; rocky slopes of wooded mountains to rich open soils; June and July. County: LeFlore (Stevens 2676).

E. VIRGINICUS L., var. GLABRIFLORUS (Vasey) Bush, forma GLABRIFLORUS; wooded valleys, hillsides and prairies; May through July; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

E. VIRGINICUS L., var. JEJUNUS (Ramaley) Bush; prairies, wooded valleys and old pastures; May through July; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

E. VIRGINICUS L., var. SUBMUTICUS Hook.; open woods and prairies; May through July; 1 sheet. County: Pushmataha.

E. VIRGINICUS L., var. VIRGINICUS, forma VIRGINICUS; prairies, valleys and open woods; May through June; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Love 145).

ERAGROSTIS

- E. CAPILLARIS* (L.) Nees; open woods, fields and hillsides; August through October; 1 sheet. County: LeFlore.
- E. FRANKII* Steud.; sandy or rocky soil and open ground; July. County: LeFlore (Stevens 2756).
- E. GLOMERATA* (Walt.) L. H. Dewey; valleys and stream banks; August and September. County: LeFlore (Ball 616).
- E. HIRSUTA* (Michx.) Nees; open woods, fields and disturbed sites; August through October; 2 sheets. County: LeFlore.
- E. HYPNOIDES* (Lam.) BSP.; wooded valleys, sandy soil and river sand bars; August through October. County: LeFlore (Ball 390).
- E. INTERMEDIA* Hitchc.; prairies, open woods, sandy soils of valleys; August through October; 3 sheets. County: Latimer.
- E. PILOSA* (L.) Beauv.; disturbed sites, old fields, and moist areas; July through September. County: LeFlore (Ball 419).
- E. POAEOIDES* Beauv.; disturbed sites, thin rocky soil and old fields; June through September. County: LeFlore (Ball 411).
- E. SPECTABILIS* (Pursh) Steud., var. *SPARSIHIRSUTA* Farwell; disturbed sites, old fields and stream banks; June through September; 2 sheets. Counties: LeFlore (Ball 400) and Pushmataha.
- E. TRICHODES* (Nutt.) Nash, var. *PILIFERA* (Scheele) Fern.; prairie, and sandy soils; June through October; 2 sheets. Counties: LeFlore and Pushmataha.
- E. TRICHODES* (Nutt.) Nash, var. *TRICHODES*; prairies, valleys and edges of woods; August through mid October; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

ERIANTHUS

E. CONTORTUS Ell.; wooded mountain slopes and valleys; August through October. County: LeFlore (Stevens 2662) from base of Rich Mountain.

E. GIGANTEUS (Walt.) Muhl.; slews, near streams and moist valleys; 1 sheet; October. Counties: Latimer and Pushmataha (Branson 52).

ERIOCHLOA

E. CONTRACTA Hitchc.; old fields, valleys and roadsides; August through October. County: LeFlore (Ball 409).

FESTUCA

F. ELATIOR L.; meadows, roadsides and valleys (introduced); May and June; 2 sheets. Counties: Latimer and LeFlore.

F. MYUROS L.; native prairies, open woods and wooded valleys (introduced); May; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

F. OBTUSA Biehler; low woods, river banks and valleys; May and June. County: LeFlore (Ball 343).

F. OCTOFLORA Walt.; open ground, old fields and waste places; April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

F. PARADOXA Desv.; prairies, valleys and thickets; May; 1 sheet. Counties: Latimer and LeFlore (Ball 350).

GYMNOPOGON

G. AMBIGUUS (michx.) BSP.; dry open woods; August through October. County: LeFlore (Ball 491).

HORDEUM

H. PUSILLUM Nutt.; open woods, prairies and waste places; late April through June; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

HYSTRIX

H. PATULA Moench; wet or rocky wooded areas; June; 3 sheets. County: LeFlore.

LEERSIA

L. ORYZOIDES (L.) Sw.; shallow water, marshes and edges of streams; August through October. County: LeFlore (Ball 474).

L. VIRGINICA Willd.; wet prairie sites, open woods, valleys and edges of streams; July through early October; 1 sheet. County: Latimer.

LEPTOCHLOA

L. FILIFORMIS (Lam.) Beauv. var. FILIFORMIS; open or shady ground and old fields; August through October; 1 sheet. County: LeFlore.

LOLIUM

L. MULTIFLORUM Lam.; meadows, edges of woods and waste places (introduced); May and June; 2 sheets. Counties: Latimer and LeFlore.

L. PERENNE L.; meadows and valleys (introduced); May; 1 sheet. County: LeFlore.

MANISURUS

M. CYLINDRICA (Michx.) Ktze.; prairies and open woods; May and June; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

MELICA

M. MUTICA Walt.; wooded valleys and hills; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

MUHLENBERGIA

M. CAPILLARIS (Lam.) Trin.; rocky wooded hills; September and October. County: LeFlore (Ball 442).

M. SOBOLIFERA (Muhl.) Trin.; moist wooded valleys and old fields; late July through September; 1 sheet. Counties: LeFlore (Ball 444) and Pushmataha.

M. TENUIFLORA (Willd.) BSP.; rocky wooded slopes; August. County: LeFlore (Ball 376).

PANICUM

P. AGROSTOIDES Spreng., var. AGROSTOIDES; wet meadows, open woods and valleys; June through September; 3 sheets. Counties: LeFlore and Pushmataha.

P. AGROSTOIDES Spreng., var. CONDENSATUM (Nash) Fern.; edge of water in meadows; September. County: LeFlore (Ball 397).

P. ANCEPS Michx.; prairies, wooded valleys and rocky slopes; August and September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. BOSCHII Poir.; open woods, rocky wooded slopes and wooded

valleys; May through July; 1 sheet. Counties: Latimer (Bebb 5501), LeFlore and Pushmataha (Waterfall 8534).

P. BRACHYANTHUM Steud.; wooded valleys, pond banks and slews; August through October. Counties: Latimer (Waterfall 10548) and Pushmataha (Waterfall 17145).

P. CAPILLARE L., var. *CAPILLARE*; sandy soil and wooded slopes; August through October; 1 sheet. County: LeFlore.

P. DICHOTOMIFLORUM Michx.; moist disturbed sites, river sandbars and prairies; June through October; 1 sheet. County: LeFlore.

P. DICHOTOMUM L.; meadows, wooded slopes and valleys; May through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. HIANIS Ell.; damp soil along streams, prairies and edges of woods; May through September; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. LANUGINOSUM Ell., var. *FASCICULATUM* (Torr.) Fern. (including *P. HUACHUCAE* and *P. TENNESSEENSE*); rocky wooded slopes, small clearings and meadows; May through September; 2 sheets. Counties: Latimer (Cornelius 1145), LeFlore and Pushmataha.

P. LANUGINOSUM Ell., var. *LINDHEIMERI* (Nash) Fern.; wooded hillsides; May through September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. LAXIFLORUM Lam.; upland wooded sites; May and June; 1 sheet. Counties: Latimer and LeFlore (Ball 330).

P. LINEARIFOLIUM Scribn., var. *LINEARIFOLIUM*; wooded hillsides, bluffs and valleys; April through June; 1 sheet. Counties:

Latimer and LeFlore (Ball 318).

P. MALACOPHYLLUM Nash; prairies, open woods and wooded hillsides; May through August; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. MICROCARPON Muhl.; wet woods and clearings; May through October; 2 sheets. Counties: Latimer and LeFlore (Ball 320).

P. OLIGOSANTHES Schultes, var. HELLERI (Nash) Fern.; prairies and wooded hillsides; May through July; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. OLIGOSANTHES Schultes, var. SCRIBNERIANUM (Nash) Fern.; prairies, hillsides and open woods; 5 sheets. Counties: Latimer and LeFlore.

P. POLYANTHES Schultes; open woods, meadows and valleys; May through October; 3 sheets. Counties: LeFlore and Pushmataha.

P. PRAECOCIUS Hitchc. and Chase; valleys, clearings and prairies; May through October; 1 sheet. County: LeFlore.

P. SCOPARIUM L.; prairies, open woods and disturbed forest sites; June through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. SPHAEROCARPON Ell.; open woods, prairies and wooded hillsides; May through July; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. VIRGATUM L.; sandy river valleys, prairies and meadows; July through October; 3 sheets. Counties: LeFlore and Pushmataha.

P. WILCOXIANUM Vasey; small clearings in wooded area; May. County: LeFlore (Ball 326).

PASPALUM

P. DILATATUM Poir.; low prairies, ditches and moist sites (introduced); June through October; 2 sheets. County: Pushmataha.

P. DISSECTUM L.; muddy banks of ponds and edges of shallow water; October and November. County: LeFlore (Ball 493).

P. DISTICHUM L.; wet sites of prairies and shallow water; June through October; 1 sheet. County: LeFlore.

P. FLORIDANUM Michx., var. *GLABRATUM* Engelm.; moist sites in prairies and pastures; July through September; 3 sheets. Counties: LeFlore and Pushmataha.

P. LAEVE Michx., var. *LAEVE*; native prairies and wooded creek banks; July through September; 3 sheets. Counties: Latimer, LeFlore (Ball 452), and Pushmataha.

P. SETACEUM Michx., var. *CILIALIFOLIUM* (Michx.) Vasey; open woods, prairies and moist slopes; July through October. County: LeFlore (Ball 456).

P. SETACEUM Michx., var. *STRAMINEUM* (Nash) D. Banks; open woods, rocky soil and prairies; June through October; 2 sheets. Counties: Latimer and Pushmataha.

P. URVILLEI Steud.; prairies, ditches and disturbed sites; July through October; 1 sheet. County: LeFlore.

PHALARIS

P. CANARIENSIS L.; escaped into prairies and waste places; May and June; 1 sheet. County: Latimer.

P. CAROLINIANA Walt.; native prairies, old fields, wooded slopes and disturbed sites; April through June; 1 sheet.

County: Latimer.

POA

P. ANNUA L.; open ground, wooded hillsides and valleys; March through May; 3 sheets. Counties: Latimer and LeFlore.

P. SYLVESTRIS Gray; wooded valleys and slopes; April and May; 2 sheets. County: Pushmataha.

P. PRATENSIS L.; open woods, valleys and meadows; April through June; 3 sheets. Counties: Latimer and LeFlore.

SACCIOLEPIS

S. STRIATA (L.) Nash.; wet prairie sites, slews and moist woodlands; late July through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

SETARIA

S. GENICULATA (Lam.) Beauv.; open fields, moist prairies and valleys; June through September; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. GLAUCA (L.) Beauv.; wooded slopes, old fields, valleys and prairies; June through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. VIRIDIS (L.) Beauv.; fields, valleys and ditches (introduced); June through September. County: LeFlore (Ball 361).

S. ITALICA (L.) Beauv.; disturbed prairies and wooded valleys (escaped); June through October; 2 sheets. County: Latimer.

SORGHASTRUM

S. NUTANS (L.) Nash; prairies and fertile valleys; September and October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

SORGHUM

S. HALEPENSE Pers.; valleys and fields; June through October (introduced). County: LeFlore (Carter 17).

SPHENOPHOLLIS

S. INTERMEDIA Rydb.; open woods and valleys; May; 1 sheet. County: Latimer.

S. OBTUSATA (Michx.) Scribn., var. LOBATA (Trin.) Scribn., forma LOBATA; wooded valleys; May; 1 sheet. County: Latimer.

S. OBTUSATA (Michx.) Scribn., var. OBTUSATA; open woods and prairies; May and June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. OBTUSA (Michx.) Scribn., var. PUBESCENS (Scribn. & Merr.) Scribn.; native prairies; May; 1 sheet. County: LeFlore.

SPOROBOLUS

S. ASPER (Michx.) Kunth, var. CANOVIRENS (Nash) Shinnery; prairies and valleys; September through November; 1 sheet. Counties: Latimer and LeFlore (Ball 468).

S. ASPER (Michx.) Kunth, var. MACER (Trin.) Shinnery; open woods and prairies; October. County: Latimer (Robinson 102).

S. CRYPTANDRUS (Torr.) Gray; open ground and sandy sites;

June through October. County: LeFlore (Ball 498).

S. POIRETII (Roem. & Schult.) Hitchc.; disturbed prairies, valleys and hillsides (introduced); June through October; 2 sheets. Counties: LeFlore and Pushmataha.

S. PYRAMIDATUS (Lam.) Hitchc.; wooded valleys and hillsides; June through October; 1 sheet. County: Latimer.

S. VAGINIFLORUS (Torr.) Wood, var. *VAGINIFLORUS*; prairies and rocky hillsides; October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

STIPA

S. AVENACEA L.; open woods, rocky slopes and valleys; April and May. County: LeFlore (Waterfall 14854).

TRIDENS

T. FLAVUS (L.) Hitchc.; open woods, wooded valleys and prairies; August through October; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

T. STRICTUS (Nutt.) Nash; moist prairie sites and wooded valleys; July through October; 10 sheets. Counties: Latimer, LeFlore and Pushmataha.

TRIPLASIS

T. PURPUREA (Walt.) Chapm.; sand bars in river valleys; July through October. County: LeFlore (Ball 500).

TRIPSACUM

T. DACTYLOIDES L.; moist fertile valleys and protected prairies; June through August; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

UNIOLA

U. LATIFOLIA Michx.; rich woods and valleys; May through September; 6 sheets. Counties: LeFlore and Pushmataha.

U. LAXA (L.) BSP.; deep soil of wooded valleys; July through October. County: LeFlore (Ball 473).

U. SESSILIFLORA Poir.; rich wooded valleys; July through October; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

ZIZANIOPSIS

Z. MILIACEA (Michx.) Doell; shallow water of lakes, streams and slews; April through July; 3 sheets. Counties: LeFlore and Pushmataha.

CYPERACEAE

CAREX

C. AMPHIBOLA Steud., var. AMPHIBOLA; wooded mountain slopes, near bluffs and moist sites; April and May. County: LeFlore (Anderson 101).

C. AMPHIBOLA Steud., var. GLOBOSA Bailey; wooded slopes, valleys and edges of lakes or swamps; April through June; 1 sheet. County: LeFlore.

C. AMPHIBOLA Steud., var. TURGIDA Fern.; wet meadows, open woods and wooded valleys; April through June; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. ANNECTENS Bickn.; moist sites of prairies and valleys; April through June. County: Latimer (Goodman and Riggs 7108).

C. BICKNELLII Britton; prairies and wooded slopes; late April through mid June; 3 sheets. County: Latimer.

C. GLANDA Dewey; banks of streams, wooded slopes and shaded lowlands; April through June; 1 sheet. County: Latimer.

C. BREVIOR (Dewey) Mack.; open woods, valleys and swamps; April through June; 4 sheets. Counties: Latimer and LeFlore.

C. CAROLINIANA Schwein., var. CUSPIDATA (Dewey) Shimmers; wooded valleys, open woods and moist prairies; late April and May; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. CEPHALOPHORA Muhl., var. CEPHALOPHORA; open woods, wooded valleys and along streams; late April through June; 3 sheets. Counties: LeFlore and Pushmataha.

C. CRINITA Lam., var. BREVICRINIS Fern.; heavy woods at base of Rich Mountain. County: LeFlore (Waterfall 17240).

C. CRUS-CORVI Shuttlew.; moist, wooded valleys; May and June; 2 sheets. Counties: Latimer and LeFlore.

C. FLACCOSPERMA Dewey; wooded valleys and near swampy areas; mid April and May. County: LeFlore (Waterfall 14845).

C. FRANKII Kunth.; slews, wet prairies and valleys; May and June; 2 sheets. Counties: Latimer, LeFlore (Waterfall 8774) and Pushmataha.

C. GRAVIDA Bailey, var. LUNELLIANA (Mack) Gleason; open woods

and valleys; mid April through June; 2 sheets. Counties: Latimer and LeFlore.

C. *HYALINA* Boott; wooded hillsides, edges of swamps and wooded flats; April; 1 sheet. County: Latimer.

C. *JOORI* Bailey; moist valleys and edges of swamps; April through October; 1 sheet. County: LeFlore.

C. *LAEVIVAGINATA* (Kuken.) Mack.; banks of ponds and small streams; late May and June. County: Pushmataha (Waterfall 16971).

C. *LATEBRACTEATA* Waterfall; rocky slopes and valleys; April and May; 1 sheet. County: LeFlore.

C. *LUPULIFORMIS* Sartwell; wooded valleys, creek banks and wet prairie sites; May through early September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. *LURIDA* Wahlenberg; wooded valleys, edges of streams and drainage ditches; late April through early August; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 12385).

C. *MEADII* Dewey; wooded valleys, wet prairies and hillsides; April and May; 1 sheet. County: LeFlore.

C. *MICRORHYNCHA* Mack.; open woods of bluffs and hillsides and sandy river valleys; April through mid May. County: Pushmataha (Waterfall 9339).

C. *MUHLENBERGII* Schkuhr., var. *ENERVIS* Boott; open woods and hillsides to swampy areas; mid April through June; 1 sheet. County: LeFlore.

C. *OXYLEPIS* Torr. & Hook.; wet prairies and wooded valleys; April and May; 1 sheet. County: Latimer.

C. *RETROFLEXA* Muhl.; wet prairies and open woods of valleys

to swampy areas; mid April through June; 2 sheets. Counties:
Latimer and Pushmataha.

C. STIPATA Muhl, var. OKLAHOMENSIS (Mack.) Gleason; low
woods, wet prairie sites; May and June; 3 sheets. Counties:
LeFlore and Pushmataha.

C. STIPATA Muhl., var. STIPATA; wet prairie sites; May; 1
sheet. County: Latimer.

C. SQUARROSA L.; wooded creek valleys; May; 1 sheet. County:
Latimer.

C. TEXENSIS (Torr.) L. H. Bailey; wooded river valleys;
May; 1 sheet. County: Pushmataha.

C. TRIBULOIDES Wahlenb.; wooded stream valleys; May and June.
County: Latimer (Clark 164).

C. VULPINOIDEA Michx.; slews, valleys and pond banks; May
and June. County: LeFlore (Waterfall 8774a).

CYPERUS
(Mackenzie 1931)

C. ACUMINATUS Torr. and Hook.; shallow water, moist wooded
sites and drainage ditches; June through mid August; 1 sheet.
County: Latimer.

C. BREVIFOLIUS (Rottb.) Hassk; open woods, drainage ditches
and valleys; July through October. County: Pushmataha (Phillips
193).

C. ERYTHORRHIZOS Muhl.; wooded valleys, flood plains and
edge of shallow water; late August through October; 2 sheets.
County: LeFlore.

C. FILICULMIS Vahl.; sandy soils, moist prairies and base of

cliffs; May through July; 1 sheet. County: LeFlore.

C. OVULARIS (Michx.) Torr., var. *SPHAERICUS* Buckl.; moist prairies, open woods and wooded valleys; June through August; 4 sheets. Counties: Latimer, LeFlore (Davy 297) and Pushmataha.

C. STRIGOSUS L.; prairies, wooded valleys and edges of streams; July through October; 5 sheets. Counties: Latimer and Pushmataha.

C. VIRENS Michx.; edge of ponds, ditches, wet prairies to wooded hillsides; late May through September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

ELEOCHARIS (Svensen 1957)

E. ACICULARIS R. & S., var. *GRACILESCENS* Svens.; wet prairies and edge of ponds; May through August; 1 sheet. County: Latimer.

E. ACUTISQUAMATA Buckl.; wet meadows and moist ravines; April through August; 1 sheet. County: Latimer.

E. QUADRANGULATA (Michx.) R. & S.; shallow water and muddy stream banks; May through October; 5 sheets. Counties: Latimer and Pushmataha.

E. OBTUSA (Willd.) Schultes, var. *OBTUSA*; river valleys and banks, ponds and seepage sites; June through October; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

E. MONTIVIDIENSIS Kunth.; shallow water of ponds, wet prairies and slopes; late March through September; 1 sheet. County: Pushmataha.

FIMBRISTYLES

F. AUTUMNALIS (L.) R. & S., var. *MUCRONULATA* (Michx.) Fern.;

shallow water of ponds and edges of streams; August through October;
County: Pushmataha (Phillips 258).

F. DICHOTOMA (L.) Vahl.; moist prairies and wooded valleys; July and August. County: Pushmataha (Waterfall 355).

F. VAHLII (Lam.) Link.; edge of ponds, lakes and sandy river beds; August through mid October; 1 sheet. County: Pushmataha.

F. SPADICA (L.) Vahl.; open meadows and prairies; May through August; 2 sheets. Counties: LeFlore and Pushmataha.

RHYNCHOSPORA

R. CAPITELLATA (Michx.) Vahl.; wooded river valleys; October. County: Pushmataha (Waterfall 10514).

R. CORNICULATA (Lam.) Gray, var. CORNICULATA; ponds and small streams of prairies and valleys; May through August; 3 sheets. Counties: LeFlore and Pushmataha.

R. GLOBULARIS (Chapm.) Small, var. RECOGNITA Gale; shallow water, wet prairies and wooded valleys; 1 sheet. Counties: Latimer and LeFlore (Waterfall 8766).

R. GLOMERATA (L.) Vahl., var. ANGUSTA Gale; wooded valleys, wet prairies and stream banks; June through early October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. HARVEYI Wm. Boott; open woods, prairies and along small streams; May through August; 2 sheets. County: LeFlore.

R. MACROSTACHYA Torr.; wet prairies, ponds and small streams; May through October; 2 sheets. Counties: Latimer and Pushmataha.

SCIRPUS
(Beetle 1947)

S. AMERICANUS Pers., var. AMERICANUS; along streams, swamps and marshy areas of prairies; May and June; 1 sheet. County: Pushmataha.

S. ATROVIRENS Willd.; wooded creek banks and valleys and slews; May through June; 2 sheets. Counties: Latimer and LeFlore.

S. CALIFORNICUS (C. Meyer) Steud.; edge of ponds, lakes and small streams; June through October; 2 sheets. County: Pushmataha.

S. CYPERINUS (L.) Kunth; stream banks and edges of lakes; May through October. County: LeFlore (Waterfall 10512).

S. KOILOLEPIS (Steud.) Gleason; shallow water of streams, ponds and wet forested sites; June; 1 sheet. County: LeFlore.

S. LINEATUS Michx.; wet prairie sites, creek banks and open woods; April through August; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

ARACEAE

ARISAEMA

A. ATRORUBENS (Ait.) Blume; forested slopes, valleys and canyons; April and May; 2 sheets. County: LeFlore.

A. DRACONTIUM (L.) Schott.; wooded slopes and valleys; May and June; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

LEMNACEAE

LEMNA

L. VALDIVIANA Phill.; slow moving streams, lakes and swamps; May through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

SPIRODELA

S. POLYRHIZA (L.) Schleid; ponds, slow flowing streams to swamps; May through October; 1 sheet. County: Latimer.

XYRIDACEAE

XYRIS

X. DIFFORMIS Chapm.; wooded stream banks, edge of ponds and swampy sites; April through October; 1 sheet. Counties: LeFlore and Pushmataha (Waterfall 10507).

X. TORTA J. E. Smith; small streams, slews and old fields; August through October. County: Latimer (Waterfall 10547).

COMMELINACEAE
(Woodson 1942)

COMMELINA

C. COMMUNIS L.; prairies, open woods and wooded slopes; June through November; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. DIFFUSA Burm. f.; wooded stream banks and edge of ponds; June through October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. ERECTA L., var. ANGUSTIFOLIA (Michx.) Fern.; wooded slopes, prairies and stream banks; June through October; 1 sheet. County: Latimer.

C. ERECTA L., var. DEAMIANA Fern.; wooded stream banks, prairies, old fields and hillsides; June through September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. ERECTA L., var. ERECTA; wooded valleys, prairies and open woods; June through mid September; 2 sheets. Counties: Latimer and Pushmataha.

C. VIRGINICA L.; wooded valleys, creek banks and small clearings; July through October; 3 sheets. Counties: Latimer and LeFlore.

TRADESCANTIA

T. ERNESTIANA Anders. & Woods, forma ALBA Waterfall; wooded mountain slopes; May; 1 sheet. County: LeFlore.

T. ERNESTIANA Anders. & Woods, forma ERNESTIANA; wooded slopes and valleys; April and May; 2 sheets. Counties: LeFlore and Pushmataha.

T. HIRSUTICAULIS Small; wooded slopes and valleys; late April and May. County: LeFlore (Waterfall 14850).

T. HIRSUTIFLORA Bush; wooded slopes and valleys and open meadows; April and May; 1 sheet. Counties: LeFlore (Stevens 1381) and Pushmataha.

T. OHIENSIS Raf., forma OHIENSIS; wooded stream banks, prairies and open woods; April through July; 11 sheets. Counties: Latimer, LeFlore and Pushmataha.

T. OHIENSIS Raf., forma PILOSA Waterfall; prairies, wooded

hillsides and stream valleys; mid March through mid June; 2 sheets.

Counties: Latimer, LeFlore and Pushmataha (Hooser 78).

T. THARPII Anders. & Woods.; prairies, river valleys and open woods; April; 2 sheets. Counties: Latimer and Pushmataha.

JUNCACEAE

JUNCUS

J. ACUMINATUS Michx., var. ACUMINATUS; wet prairie sites; May.
County: Pushmataha (Hopkins & Valkenburgh 4311).

J. ACUMINATUS Michx., var. ROBUSTUS Engelm.; open woods and valleys; May and June. County: LeFlore (Hopkins & Nelson 580).

J. BRACHYCARPUS Engelm.; low wet prairies, edge of ponds and ditches; late May through July; 1 sheet. County: Pushmataha.

J. BUFONIUS L.; wet prairies, old fields; late April through June; 1 sheet. County: LeFlore.

J. CORIACEUS Mackenzie; wooded hillsides, creek banks and swampy areas; mid July through October; 1 sheet. Counties: Latimer, LeFlore (Stevens 2693) and Pushmataha (Waterfall 349).

J. CRASSIFOLIUS Buch.; edge of ponds, streams and wet prairies; June through October; 1 sheet. Counties: Latimer, LeFlore (Stevens 2693) and Pushmataha (Waterfall 349).

J. DIFFUSISSIMUS Buckl.; edge of streams, wet prairies, sandy soils; late May through July; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

J. EFFUSUS L., var. SOLUTUS Fern. & Wieg.; creek banks and valleys and wet prairies; May through August; 2 sheets. Counties: Latimer and LeFlore.

J. INTERIOR Wieg.; prairies, seepy hillsides, edges of ponds and small streams; May through July; 2 sheets. County: Pushmataha.

J. MARGINATUS Rostk.; prairies, old fields and wooded valleys; late May through July; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

J. REPENS Michx.; rocky creek bed; September. County: LeFlore (Stevens 2721).

J. SCIRPOIDES Lam.; prairies, open woods and streams; May through August; 1 sheet. County: LeFlore.

J. TENUIS Willd., var. TENUIS; wooded slopes and valleys, edge of streams and ponds; May and June; 1 sheet. County: Pushmataha.

LUZULA

L. BULBOSA (Wood) Rydb.; wooded valleys, prairies, old fields and wooded slopes; late March through May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

L. ECHINATA (Small) F. J. Hern., var. MESOCHOREA F. J. Hern.; forested slopes and valleys; April and May; 2 sheets. County: Pushmataha.

LILIACEAE

ALETTRIS

A. FARINOSA L.; prairies; June and July; 1 sheet. County: Pushmataha.

ALLIUM
(Ownbey and Case 1955)

A. CANADENSE L., var. CANADENSE; prairies, open woods, valleys; late April and May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. CANADENSE L., var. FRASERI Ownbey; prairies, wooded slopes and river valleys; mid April through June; 2 sheets. Counties: Latimer and LeFlore.

A. CANADENSE L., var. HYACINTHOIDES (Bush) Ownbey; open woods, prairies and creek banks. County: Pushmataha (Hooser 77).

A. CANADENSE L., var. MOBILENSE (Regel.) Ownbey; creek banks, prairies and open woods; late April and May. Counties: Latimer (Bebb 5383), LeFlore (Mason 120) and Pushmataha (Hooser 77).

A. PERDULCE S. V. Fraser; wooded slopes, valleys and prairies; April and May; 3 sheets. Counties: LeFlore and Pushmataha.

A. VINEALE L., var. COMPACTUM (Thuill.) Aschers; wooded slopes and old fields; May and June; 1 sheet. County: LeFlore.

AMIANTHIUM

A. MUSCAETOXICUM (Walt.) Gray; open woods near creek; May and June. County: LeFlore (Blakley 1429).

CAMASSIA

C. ANGUSTA (Engelm. and Gray) Blankenship; wooded slopes, valleys and prairies; April and May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. SCILLOIDES (Raf.) Cory; wooded hillsides and valleys; April through June; 4 sheets. Counties: Latimer and Pushmataha.

ERYTHRONIUM

E. ALBIDUM Nutt., var. ALBIDUM; creek banks and wooded slopes; March and April; 4 sheets. Counties: Latimer and LeFlore.

E. ALBIDUM Nutt., var. COLORATUM Sterns; prairies, open woods and valleys; March and April. County: LeFlore (Mason sin. num.).

E. AMERICANUM Ker.; heavily wooded valleys and swampy areas; March and April; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

NOTHOSCORDUM

N. BIVALVE (L.) Britton; wooded valleys, prairies and rocky hillsides; late March through May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

POLYGONATUM

P. CANALICULATUM (Muhl.) Pursh.; deep soil of river and creek valleys; May through July; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

SMILACINA

S. RACEMOSA Desf., var. CYLINDRATA Fern.; wooded hillsides and valleys; May and June; 3 sheets. County: LeFlore.

SMILAX

S. BONA-NOX L.; wooded stream banks and valleys; late July through mid October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. GLAUCA Walt., var. GLAUCA; wooded stream banks, slopes and valleys; August through October; 4 sheets. Counties: LeFlore and Pushmataha.

S. HERBACEA L.; wooded hillsides and valleys; June and July; 1 sheet. County: LeFlore.

S. TAMNOIDES L.; wooded stream banks and valleys; August and September; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

TRILLIUM

T. VIRIDE Beck; wooded valleys and rich woods of mountains; April and May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

UVULARIA

U. GRANDIFLORA J. E. Smith; densely wooded slopes; April and May; 1 sheet. County: LeFlore.

VERATRUM

V. WOODII Robbins; wooded, moist mountainsides; September. County: LeFlore (Stevens 2752).

YUCCA (Webber 1953)

Y. GLAUCA Nutt., var. GLAUCA; prairies and edge of forest; May and June; 1 sheet. County: Pushmataha.

ZIGADENUS

Z. NUTTALLII Gray; rocky hillsides, open woods and prairies; April and May; 2 sheets. Counties: Latimer and LeFlore (Ealy 61).

AMARYLLIDACEAE

AGAVE
(Shinners 1951)

A. LATA Shinners; native prairies, deep woods and rocky hill-sides; June through August; 2 sheets. Counties: Latimer and Pushmataha.

A. VIRGINICA L.; prairies and wooded valleys; June and July; 2 sheets. Counties: LeFlore and Pushmataha.

HYPOXIS

H. HIRSUTA (L.) Coville; native prairies, wooded hills and valleys; April and May; 8 sheets. Counties: Latimer, LeFlore (Stevens 1408) and Pushmataha.

ZEPHYRANTHES

Z. BRAZOSSENSIS Traub.; wooded slopes and valleys; August and September; 2 sheets. Counties: Latimer and Pushmataha.

DIOSCOREACEAE

DIOSCOREA

D. QUATERNATA (Wall.) Gmel.; wooded rocky slopes, stream valleys and deep woods; fr. June through September. Counties: LeFlore (Waterfall 14837) and Pushmataha (Waterfall 8533).

D. VILLOSA L., forma GLABRIFOLIA (Bartlett) Fern.; wooded valleys; June and July; 2 sheets. County: Latimer.

IRIDACEAE

IRIS

I. CRISTATA Ait.; wooded valleys; April and May; 1 sheet.

Counties: LeFlore and Pushmataha (Waterfall 11382).

SISYRINCHIUM

S. ANGUSTIFOLIUM Mill.; open woods, prairies, hillsides and valleys; late April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. CAMPESTRE Bickn., forma CAMPESTRE; open woods, valleys, hillsides and prairies; April and May; 1 sheet. Counties: Latimer and LeFlore (Griffith sin. num.).

MARANTACEAE

THALIA

T. DEALBATA Roscoe; swamps, small ponds and river valleys; June and July. County: LeFlore (Thornton sin. num.).

ORCHIDACEAE

CALOPOGON

C. PULCHELLUS (Salisb.) R. Br.; wet native prairie; May and early June; 2 sheets. County: Pushmataha.

SPIRANTHES

S. CERNUA (L.) L. C. Rich; wooded valleys, prairies and open

woods; September and October. County: LeFlore (Waterfall 16918).

S. VERNALIS Engelm. & Gray; native prairies and river valleys; June and July; 7 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 12382).

S. TUBEROSA Raf.; native prairie and open woods; September; 1 sheet. County: Pushmataha.

SAURURACEAE

SAURURUS

S. CERNUUS L.; moist wooded valleys; July through September; 1 sheet. County: Pushmataha.

SALICACEAE

POPULUS

P. DELTOIDES Marsh.; sandy creek and river banks and strip-pit spoil banks; fl. March and April; 1 sheet. County: Latimer.

SALIX

S. CAROLINIANA Michx.; edge of ponds and lakes and streams and wooded slopes; late April through June; 6 sheets. Counties: Latimer, LeFlore (Hopkins & Nelson 569) and Pushmataha.

S. HUMILIS Marsh., var., *HYPORHYSA* Fern.; edges of lakes, stream beds and banks; April and May; 4 sheets. Counties: LeFlore and Pushmataha.

S. INTERIOR Rowlee, forma *INTERIOR*; lake shores and sandy soils along streams; April and May; 1 sheet. County: Pushmataha.

S. NIGRA Marsh; stream banks, moist wooded valleys to rocky slopes; April and May; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

JUGLANDACEAE

CARYA

C. AQUATICA (Michx. f.) Nutt.; wooded valleys, along streams and on slopes; fr. July through September; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. CORDIFORMIS (Wang.) K. Koch; wooded valleys and hillsides; fr. August through October; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. ILLINOENSIS (Wang.) K. Koch; wooded valleys; fr. August through October; 2 sheets. Counties: Latimer and LeFlore.

C. MYRISTICAEFORMIS (Michx. f.) Nutt.; open woods of valleys; fl. April; 1 sheet. County: Pushmataha.

C. OVATA (Mill.) K. Koch; wooded hillsides and valleys; June; 1 sheet. County: Pushmataha.

C. TEXANA Buckl.; open woods of valleys and hillsides; August through October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. TOMENTOSA (Poir.) Nutt.; wooded hillsides and valleys; July through October; 3 sheets. Counties: Latimer and LeFlore.

JUGLANS

J. NIGRA L.; wooded stream banks and valleys; July through September; 2 sheets. Counties: Latimer and LeFlore.

BETULACEAE

ALNUS

A. SERRULATA (Ait.) Willd.; along banks and in beds of small streams; May through August; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

BETULA

B. NIGRA L.; along banks of and in beds of rivers and small streams; April through June; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

CARPINUS

C. CAROLINIANA Walt.; wooded hillsides and valleys and along streams; June through October; 8 sheets. Counties: LeFlore and Pushmataha.

OSTRYA

O. VIRGINIANA (Mill.) K. Koch, var. LASIA Fern.; wooded hillsides, valleys and along streams and lakes; May through August; 6 sheets. Counties: LeFlore and Pushmataha.

FAGACEAE

CASTANEA

C. OZARKENSIS Ashe; deep woods at base of Rich Mountain; September. County: LeFlore (Stevens 2663).

FAGUS

F. GRANDIFOLIA Ehrh., var. CAROLINIANA (Loud.) Fern. and Rehd.;
along forest streams. County: LeFlore (Logan 2014).

QUERCUS

Q. ALBA L.; wooded valleys and slopes; August and September;
3 sheets. Counties: LeFlore and Pushmataha.

Q. COCCINEA Muenchh.; wooded valleys; August and September;
1 sheet. County: Latimer.

Q. FALCATA Michx., var. FALCATA; wooded valleys, slopes and
ridges; September and October; 5 sheets. Counties: Latimer,
LeFlore and Pushmataha.

Q. FALCATA Michx., var. PAGODAEFOLIA Ell.; wooded valleys,
slopes and ridges; August and September; 5 sheets. Counties:
Latimer, LeFlore and Pushmataha.

Q. FALCATA Michx., var. TRILOBA (Michx.) Nutt.; wooded valleys
and slopes; August and September; 3 sheets. Counties: LeFlore and
Pushmataha.

Q. LYRATA Walt.; wooded valleys, slopes and along streams;
August through October; 2 sheets. County: LeFlore.

Q. MACROCARPA Michx.; wooded valleys and stream banks; August
and September; 1 sheet. Counties: Latimer and Pushmataha (Sellers
101).

Q. MARILANDICA Muenchh.; wooded hillsides and valleys; August
and September; 2 sheets. Counties: Latimer and LeFlore.

Q. MUEHLENBERGII Engelm., var. MUEHLENBERGII; wooded slopes,
ridges and valleys; August and September; 3 sheets. Counties:

Latimer, LeFlore and Pushmataha.

Q. NIGRA L.; wooded valleys and along streams; August through October; 10 sheets. Counties: Latimer, LeFlore and Pushmataha.

Q. PAULSTRIS Muenchh.; wooded slopes along valleys and edge of small prairies; August and September; 4 sheets. Counties: Latimer and Pushmataha.

Q. PHELLOS L.; wooded slopes and valleys; August and September; 2 sheets. Counties: Latimer and LeFlore.

Q. RUBA^R L., var. BOREALIS (Michx. f.) Farw.; wooded valleys; August; 2 sheets. County: LeFlore.

Q. SHUMARDII Buckl., var. SHUMARDII; wooded slopes and valleys August and September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

Q. SHUMARDII Buckl., var. SCHNECKII (Britton) Sarg.; wooded slopes, valleys and along streams; August and September; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

Q. STELLATA Wang.; wooded valleys, along streams and on hillsides; August and September; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

Q. VELUTINA Lam., var. VELUTINA, forma MACROPHYLLA (Dippell) Trel.; wooded slopes and valleys; August through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

ULMACEAE

CELTIS

C. LAEVIGATA Willd.; wooded slopes and valleys and along streams; July through October; 4 sheets. Counties: Latimer, LeFlore

and Pushmataha.

C. OCCIDENTALIS Pursh., var. CANINA (Raf.) Sarg.; wooded slopes and valleys; May through August; 1 sheet. County: Latimer.

C. TENUIFOLIA Nutt.; wooded slopes and valleys; August through October; 3 sheets. County: LeFlore.

ULMUS

U. ALATA Michx.; open woods, edges of prairies and hillsides; March and April; 4 sheets. County: Pushmataha.

MORACEAE

MACLURA

M. POMIFERA (Raf.) Schneider; open woods, valleys and edge of meadows; June through September; 2 sheets. Counties: Latimer and Pushmataha.

MORUS

M. ALBA L.; wooded upland; May through July (introduced); 1 sheet. County: LeFlore.

M. RUBRA L.; wooded valleys and along streams (introduced); May and June; 3 sheets. Counties: Latimer and Pushmataha.

URTICACEAE (Hermann 1946)

BOEHMERIA

B. CYLINDRICA (L.) Sw.; shady stream banks, flood plains and

edges of swamps; July through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

LAPORTEA

L. CANADENSIS (L.) Wedd.; low woods and stream banks; July through September; 3 sheets. County: LeFlore.

PARIETARIA

P. PENNSYLVANICA Muhl.; wooded slopes, shaded areas and moist gravelly sites; May through September; 1 sheet. County: LeFlore.

PILEA

P. PUMILA (L.) Gray; wooded slopes and valleys and moist sites; May through July; 2 sheets. Counties: Latimer and LeFlore.

LORANTHACEAE

PHORADENDRON

P. SEROTINUM (Raf.) M.C. Johnston; parasite on deciduous trees; September through November; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

ARISTOLOCHIACEAE

ARISTOLOCHIA

A. TOMENTOSA Sims; wooded river valleys; May and June; 1 sheet. County: Pushmataha.

POLYGONACEAE

BRUNNICHIA

B. CIRRHOSA Gaertn.; low wooded slopes, valleys and along stream banks; August through October; 5 sheets. Counties: LeFlore and Pushmataha.

ERIOGONUM

E. VESPINUM Shinnery; hillsides and gravelly soil; August through October. County: LeFlore (Waterfall 15237).

POLYGONUM
(Stanford 1926)

P. CONVULVULUS L.; gravelly soils and old fields; June through September; 1 sheet. County: Pushmataha.

P. HYDROPIPER L.; damp soil and wet woods (introduced); June through October. County: Pushmataha (Waterfall 131).

P. HYDROPIPEROIDES Michx., var. BUSHIANUM Stanford; shallow water, moist prairies and wooded sites; May through October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. HYDROPIPEROIDES Michx., var. HYDROPIPEROIDES; moist woods and edges of ponds and streams; June through September; 2 sheets. Counties: Latimer and LeFlore.

P. HYDROPIPEROIDES Michx., var. OPELOUSANUM (Riddell) Stone; edge of water, moist prairies and wooded sites; June through October; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. ORIENTALE L.; waste places and sandy soils (introduced); June through October. County: Pushmataha (Waterfall 158).

P. PENNSYLVANICUM L.; edge of water, wet woods and prairies; June through September; 4 sheets. Counties: Latimer and LeFlore.

P. PERSICARIA L.; shallow water, wet woods and waste places; June through October; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. PUNCTATUM Ell.; wet woods and valleys and waste places; July through October; 2 sheets. County: Pushmataha.

P. RAMOSISSIMUM Michx.; wet prairies, waste places, open woods and edge of shallow water; June through October; 2 sheets. Counties: Latimer and LeFlore.

P. SCANDENS L., var. *SCANDENS*; wet woods, slopes and valleys; June through October; 3 sheets. Counties: LeFlore and Pushmataha.

P. TENUE Michx.; hillsides, open woods and eroded places; June through October. County: Pushmataha (Waterfall 353).

RUMEX

R. ACETOSELLA L.; open woods, fields and meadows (naturalized); May through July; 3 sheets. Counties: LeFlore and Pushmataha.

R. ALTISSIMUS Wood.; open woods, prairies and along streams and ponds; May through August; 3 sheets. County: LeFlore.

R. CRISPUS L.; prairies, wooded valleys, cultivation and old fields (naturalized); May through July; 12 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. HASTATULUS Baldw.; rocky hillsides, meadows and creek valleys; May through mid July; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. PULCHER L.; stream banks, open woods and old fields

(naturalized); May and June; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

TOVARA

T. VIRGINIANA (L.) Raf.; wooded hillsides and valleys; July through October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

CHENOPODIACEAE

CHENOPODIUM (Aellen and Just 1934)

C. ALBUM L.; old fields, stream banks and cultivation (naturalized); June through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. AMBROSIOIDES L., var. AMBROSIOIDES; old fields, thin hillside soils and open woods (naturalized); July through October; 2 sheets. Counties: LeFlore and Pushmataha.

C. AMBROSIOIDES L., var. ANTHELMINTICUM (L.) Gray; old fields, prairies and open woods (naturalized); July through October; 2 sheets. Counties: LeFlore and Pushmataha.

C. PUMILIO R. Br.; rocky slopes, along streams and waste places (naturalized); June through October; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 11211).

MONOLEPIS

M. NUTTALLIANA (R. & S.) Greene; rocky hillsides, waste places and alkaline or saline sites; May through September; 1 sheet.

County: Latimer.

AMARANTHACEAE
(Standley 1917)

AMARANTHUS

A. ALBUS L., var. ALBUS; disturbed or waste sites; June through October; 1 sheet. County: LeFlore.

A. GRAECIZANS L.; old fields, rocky hillsides and along streams; June through October; 2 sheets. County: LeFlore.

A. RETROFLEXUS L.; waste places, meadows, along streams and in disturbed sites; June through October; 2 sheets. Counties: Latimer and LeFlore.

A. SPINOSUS L.; meadows, disturbed sites, old fields and valleys; June through October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

FROELICHIA

F. GRACILIS (Hook.) Moq.; native prairies, rocky hillsides and wooded valleys; May through August; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

IRESINE

I. RHIZOMOTOSA Standl.; wooded valleys and stream banks; August through September; 2 sheets. Counties: Latimer and Pushmataha.

NYCTAGINACEAE

MIRABILIS

M. ALBIDA (Walt.) MacM.; open woods of valleys; late June through October. Counties: Latimer (Wallis 7531) and LeFlore (Waterfall 15238).

M. NYCTAGINEA (Michx.) MacM.; prairies and open woods of valleys; April through October; 1 sheet. County: Latimer.

PHYTOLACCACEAE

PHYTOLACCA

P. AMERICANA L.; open woods, pastures, wooded slopes and disturbed sites; May through October; 5 sheets. Counties: Latimer and LeFlore.

AIZOACEAE

MOLLUGO

M. VERTICILLATA L.; wooded creek banks, open woods, waste sites and sandy soils; June through September; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 178).

PORTULACACEAE

CLAYTONIA

C. VIRGINICA L.; prairies, lawns, open woods and valleys; late March and April; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

PORTULACA

P. PARVULA Gray; rocky slopes, old fields, valleys and sandy soils; June through October. County: Pushmataha (Waterfall 199).

P. OLERACEA L.; shallow water, edge of ponds and streams, cultivated fields and thin soils; August through October; 2 sheets. County: LeFlore.

TALINUM

T. PARVIFLORUM Nutt.; rocky hillsides; June through August. County: Pushmataha (Waterfall 345).

CARYOPHYLLACEAE

ARENARIA
(Steyermark 1941)

A. DRUMMONDII Shinnery; rocky soil, along streams, open forests and old fields; April through June; 3 sheets. Counties: Latimer (McLean 74), LeFlore (Clark 346) and Pushmataha.

A. PATULA Michx.; rocky slopes, prairies, open woods and along streams; April and May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

CERASTIUM

C. BRACHYPODUM (Engelm.) Robinson; along streams, old fields and rocky hillsides; March through April. County: LeFlore (Mason sin. num.).

C. VISCOSUM L.; prairies, creek valleys and wooded hillsides; April and May; 5 sheets. Counties: Latimer and Pushmataha.

C. VULGATUM L.; creek valleys, edge of prairies and open woods; April and May. County: LeFlore (Waterfall 14847).

PARONYCHIA
(Core 1941)

P. FASTIGIATA (Raf.) Fern.; wooded slopes and valleys and open woods; May; 2 sheets. Counties: LeFlore and Pushmataha.

P. VIRGINICA Spreng., var. *SCOPARIA* (Small) Cory; rocky hillsides and ridges; September and October. County: Pushmataha (Waterfall 10549).

SAGINA

S. DECUMBENS (Ell.) T. & G.; wooded valleys, prairies, old pastures and waste places; April and May. County: Latimer (Erwin 64).

SILENE

S. ANTIRRHINA L., forma *DEANEANA* Fern.; open woods, old fields and prairies; May and June. County: Latimer (Waterfall 14815).

S. STELLATA (L.) Ait. f.; wooded valleys and prairies; June through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 155).

S. VIRGINICA L.; wooded hillsides and valleys; April through October; 4 sheets. Counties: LeFlore and Pushmataha.

STELLARIA

S. MEDIA (L.) Cyrill; wooded valleys, old fields and wet sites; April through July; 1 sheet. County: LeFlore.

NYMPHACEAE

BRASENIA

B. SCHREBERI Gmel.; upper portion of small lakes and ponds; June and July; 2 sheets. Counties: Latimer and Pushmataha.

NELUMBO

N. LUTEA (Willd.) Pers.; ponds and lakes; July through September; 1 sterile sheet. County: LeFlore.

NUPHAR

N. ADVENA (Ait.) Ait. f., var. ADVENA; ponds and small pools in creeks and rivers; May through September; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

N. ADVENA (Ait.) Ait. f., var. TOMENTOSUM Nutt.; ponds and small pools in creeks and rivers; May through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

N. OVATUM (G. S. Miller & Standley) Standley; ponds and along edges of streams; June through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

N. OZARKANUM (Mill. & Standl.) Standl.; in ponds and along edges of streams; June through September; 2 sheets. Counties: Latimer and LeFlore.

NYMPHAEA

N. ODORATA Ait.; sloughs, ponds and streams; June through September. County: LeFlore (Norman sin. num.).

RANUNCULACEAE

ANEMONE

A. CAROLINIANA Walt., forma CAROLINIANA; prairies and old pastures; late March and April; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. CAROLINIANA Walt., forma VIOLACEA Clute; prairies and old pastures; March and April; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. DECAPETALA Ard.; hillsides and wooded valleys; March and April. County: Pushmataha (Kong 820).

ANEMONELLA

A. THALICTROIDES (L.) Spach.; wooded valleys, stream banks and densely wooded slopes; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

AQUILEGIA
(Payson 1918)

A. CANADENSIS L., var. LATIUSCULA (Greene) Munz; rocky wooded slopes and valleys; April through July. County: LeFlore (Briscoe 33).

CLEMATIS
(Erickson 1943)

C. PITCHERI T. & G.; vine of thickets and woods; late May through October; 1 sheet. County: Latimer.

C. VERSICOLOR Small; vining plant of wooded valleys, slopes and

bluffs; May through August; 4 sheets. Counties: Latimer and Pushmataha.

DELPHINIUM
(Perry 1937)

D. CAROLINIANUM Walt.; prairies and open woods; May through June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

D. TRICORNE Michx., forma ALBIFLORA Millsp.; prairies and open woods; May and June. Counties: Latimer (Waterfall 16014), LeFlore (Clark 342) and Pushmataha (Love 178).

D. VIRESCENS Nutt.; prairies and open woods; late April through June; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

RANUNCULUS
(Benson 1948)

R. ABORTIVUS L.; wooded valleys and damp slopes; April and May; 2 sheets. Counties: LeFlore and Pushmataha.

R. FASCICULARIS Muhl.; open woods, hillsides, meadows and old fields; March through May; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. LAXICAULIS (T. & G.) Darby; wooded stream banks and valleys; April through June; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Hopkins & Cross 1717).

R. MICRANTHUS Nutt.; stream banks, low woods and valleys; April and May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. RECURVATUS Poir.; along streams, wooded valleys and dense woods; April and May; 1 sheet. County: Pushmataha.

THALICTRUM
(Boivin 1944)

T. DASYCARPUM Fisch. & Lall., var. HYPOGLAUCUM (Rydb.)

Boivin; wooded valleys and stream banks; May through October;

1 sheet. County: Latimer.

BERBERIDACEAE

PODOPHYLLUM

P. PELTATUM L.; wooded valleys, thickets and shaded areas;

April through early June; 4 sheets. Counties: Latimer, LeFlore
and Pushmataha.

MENISPERMACEAE

CALYCARPUM

C. LYONI (Pursh) Gray; along wooded banks of rivers and

creeks, dense woods of hillsides and valleys; fl. May and June;

5 sheets. Counties: Latimer, LeFlore and Pushmataha.

COCCULUS

C. CAROLINUS (L.) DC.; wooded slopes and valleys; July through

August; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

MAGNOLIACEAE

MAGNOLIA

M. ACUMINATA L.; moist, dense mixed hardwood forest of

northern slopes of Rich Mountain; 2 sheets. County: LeFlore.

ANONACEAE

ASIMINA

A. TRILOBA (L.) Dunal; wooded slopes and stream valleys;
fl. in April and May; 1 sheet. County: LeFlore.

LAURACEAE

LINDERA

L. BENZOIN (L.) Blume, var. BENZOIN; wooded hillsides and
stream valleys; May through July; 1 sheet. County: Latimer.

SASSAFRAS

S. ALBIDUM (Nutt.) Nees, var. ALBIDUM; wooded mountains and
stream valleys; fl. April through June; 2 sheets. Counties:
LeFlore and Pushmataha.

S. ALBIDUM (Nutt.) Nees, var. MOLLE (Raf.) Fern.; wooded hill-
sides, valleys and fence rows; fl. April through June; 4 sheets.
Counties: Latimer, LeFlore (Jenson 148) and Pushmataha.

PAPAVERACEAE

SANGUINARIA

S. CANADENSIS L.; heavily wooded valleys and stream banks;
March and April; 5 sheets. Counties: Latimer and LeFlore.

FUMARIACEAE

CORYDALIS
(Ownbey 1947)

C. CRYSTALLINA Engelm.; open woods, prairies and disturbed sites; April through June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 9332).

C. MICRANTHA (Engelm.) Gray; rocky slopes, wooded valleys and old fields; March and April; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

CRUCIFERAE

ARABIS
(Hopkins 1938)

A. CANADENSIS L.; heavily wooded slopes and valleys; fl. April through June; 1 sheet. Counties: LeFlore and Pushmataha (Hopkins & Waterfall 2163).

A. MISSOURIENSIS Greene; bluffs, ridges and rocky wooded slopes; fl. May and June; 1 sheet. County: Latimer.

CAPSELLA

C. BURSA-PASTORIS (L.) Medic.; hillsides, old fields, disturbed sites of valleys (natur.); March through June; 2 sheets. Counties: Latimer and Pushmataha.

CARDAMINE

C. PARVIFLORA L., var. ARENICOLA (Britt.) D. E. Shulz; wooded slopes and valleys and open fields; March through July; 2 sheets. Counties: Latimer, LeFlore (Mason sin. num.), and

Pushmataha.

C. *PENSYLVANICA* Muhl.; old fields, wooded slopes and wet sites; April and May; 2 sheets. Counties: LeFlore and Pushmataha.

DENTARIA

D. *LACINIATA* Muhl.; wooded slopes and valleys and along streams; March through May; 2 sheets. Counties: LeFlore and Pushmataha (Hooser 22).

DRABA (Fernald 1934)

D. *BRACHYCARPA* Nutt.; open woods, old fields and disturbed sites; March through May; 2 sheets. Counties: Latimer and Pushmataha.

LEPIDIUM (Hitchcock 1936)

L. *DENSIFLORUM* Schrad.; native prairies, old fields and disturbed sites; April through July; 3 sheets. Counties: LeFlore and Pushmataha.

L. *VIRGINIANUM* L.; disturbed sites, old fields, native prairies and open woods; April through May; 5 sheets. Counties: Latimer and LeFlore.

RORIPPA (Butters 1940)

R. *ISLANDICA* (Oeder) Borbas, var. *FERNALDIANA* Butt. & Abbe; wooded stream banks, drainage ditches and wet sites; May through September; 1 sheet. County: Latimer.

SELENIA

S. AUREA Nutt.; rocky sites, old fields and waste areas;
March through May. County: Pushmataha (Langdon 344).

SIBARA

S. VIRGINICA (L.) Rollins; old fields, rocky to sandy soils
and prairies; March through May; 3 sheets. Counties: LeFlore and
Pushmataha.

STREPTANTHUS

S. MACULATUS Nutt.; wooded hillsides, stream valleys, bluffs
and sandy soils; April and May; 2 sheets. Counties: Latimer,
LeFlore (Ward 104) and Pushmataha.

THLASPI

T. ARVENSE L.; prairies, disturbed sites and stream banks
(naturalized from Europe); April to August; 2 sheets. Counties:
Latimer and LeFlore.

CAPPARIDACEAE

CLEOME

C. SPINOSA Jacq.; waste places (introduced from the tropics);
September. County: LeFlore (Stevens 2616).

POLANISIA
(Ernst 1963)

P. DODECANDRA (L.) DC., var. TRACHYSPERMA (T. & G.) Iltis;

sandy soils, prairies and along streams; July through September;
4 sheets. Counties: Latimer and Pushmataha.

DROSERACEAE

DROSERAS

D. ANNUA Reed; depressions on west side of low mounds in
prairie; May. County: Pushmataha (Barclay & Doty sin. num.).

CRASSULACEAE

SEDUM

S. NUTTALLIANUM Raf.; thin soil, seeps and open woods; May
and June; 1 sheet. County: Pushmataha.

SAXIFRAGACEAE

HEUCHERA

H. AMERICANA L., var. *AMERICANA*; heavily forested hillsides
and valleys; April through June; 3 sheets. Counties: LeFlore
and Pushmataha.

HYDRANGEA

H. ARBORESCENS L., var. *ARBORESCENS*; wooded slopes, stream
banks and valleys; June through September; 1 sheet. County: LeFlore.

ITEA

I. VIRGINICA L.; wooded valleys and swamps; fr. July through
September; 2 sheets. County: LeFlore.

PENTHORUM

P. SEDOIDES L.; valleys, stream banks and moist shaded woods; June through September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 188).

RIBES

R. CYNOSBATI L.; wooded valleys and mountain sides; fl. April and May; 2 sheets. Counties: LeFlore and Pushmataha.

SAXIFRAGA
(Goodman 1950)

S. TEXANA Buckl.; open woods, valleys and wet sites at edge of prairies; March and April; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

HAMAMELIDACEAE
(Palmer 1932)

HAMAMELIS

H. VERNALIS Sarg., var. *TOMENTELLA* (Rehd.) Palmer; along streams in valleys and on hillsides; fl. March through May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 15281).

LIQUIDAMBAR

L. STYRACIFLUA L.; wooded valleys and streams; fl. April and May; 4 sheets. Counties: LeFlore and Pushmataha.

PLATANACEAE

PLATANUS

P. OCCIDENTALIS L.; wooded slopes, valleys and along streams; fl. April and May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

ROSACEAE

AGRIMONIA
(Rydberg 1913)

A. PARVIFLORA Ait.; rocky slopes, stream banks, damp sites and thickets; July through October. County: Latimer (Waterfall 11218).

A. PUBESCENS Wallr.; wooded valleys and slopes; July through October; 3 sheets. Counties: LeFlore and Pushmataha.

A. ROSTELLATA Wallr.; open woods and along shaded stream banks; July through September. Counties: LeFlore (Stevens 2772) and Pushmataha (Waterfall 344).

AMELANCHIER

A. ARBOREA (Michx. f.) Fern.; wooded hillsides, valleys and along streams; fl. late March and April; 1 sheet. Counties: Latimer (Bigger 211), LeFlore and Pushmataha (Hooser 4).

CRATAEGUS

C. COLLINA Chapm.; open woods and thickets of hills and valleys; fl. April and May; 2 sheets. Counties: Latimer and

LeFlore.

C. CRUS-GALLI L.; open woods, thickets and hillsides; fl. April and May; 3 sheets. Counties: Latimer and LeFlore (Stevens 1372).

C. MACKENZII Sarg.; open woods, hillsides and along streams; fl. April. County: LeFlore (Stevens 2650).

C. MARSHALLII Egglest.; open woods, valleys and along streams; fl. April; 1 sheet. County: Pushmataha.

C. SPATHULATA Michx.; wooded valleys and bases of hills; fl. April and May; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. UNIFLORA Muenchh.; rocky wooded hillsides and stream banks; fl. April; 1 sheet. County: Latimer.

C. VIRIDIS L.; wet wooded valleys and along streams; fl. April and May; 3 sheets. County: Latimer.

GEUM
(Fernald and Weatherby 1922)

G. CANADENSE Jacq., var. CAMPORUM (Rydb.) Fern.; in open woods, wooded valleys and along streams; late May through mid July; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

G. CANADENSE Jacq., var. TEXANUM Fern.; open woods of valleys and hillsides; late May and June; 2 sheets. Counties: Latimer and LeFlore.

GILLENIA

G. STIPULATA (Muhl.) Trel.; woods, thickets and rocky slopes; May through July; 1 sheet. County: LeFlore.

POTENTILLA
(Fernald 1931)

P. SIMPLEX Michx.; edge of prairies, wooded valleys and slopes; mid April through May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

PRUNUS

P. AMERICANA Marsh., var. AMERICANA; dense to open woods of hillsides and valleys, along small streams; fr. June through August; 3 sheets. Counties: Latimer and LeFlore.

P. ANGUSTIFOLIA Marsh.; wooded hillsides; fr. May through July; 1 sheet. County: Latimer.

P. MEXICANA S. Wats; wooded hillsides and valleys; fr. May through July; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. MUNSONIANA Wright. & Hedrick; wooded valleys and richer soils along streams; fr. in July and August; 2 sheets. County: Latimer.

P. SEROTINA Ehrh.; wooded slopes and valleys; fr. June through September; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

ROSA

R. CAROLINA L.; prairies, open woods and hillsides; fl. May and June; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. FOLIOLOSA Nutt.; prairies and open woods; fl. June and July; 4 sheets. County: Latimer.

R. SETIGERA Michx., var. INERMIS Palm. & Steyerl.; thickets

and open woods; fl. May and June. County: LeFlore (Stevens 2702).

R. SETIGERA Michx., var. SETIGERA; open woods, valleys and old fields; May and June; 1 sheet. Counties: Latimer and LeFlore (Blakley 1460).

R. SETIGERA Michx., var. TOMENTOSA T. & G.; May and June; 2 sheets. Counties: Latimer and Pushmataha.

RUBUS
(Bailey 1932 and 1945)

R. ABORIGINUM Rydb.; open woods, prairies and wooded valleys; fr. May through July; 3 sheets. Counties: Latimer and Pushmataha.

R. LOUISIANUS Berger; ravines, valleys along streams; fl. May; fr. June and July; 1 sheet. Counties: Latimer and LeFlore (Waterfall 14822).

R. OKLAHOMUS Bailey; valleys, ravines and open woods; fl. April and May; fr. June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. OZARKENSUS Bailey; thickets of hills and valleys; fl. May; fr. June and July; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. SCRIBILIS Bailey; hillsides, open woods and valleys; fl. April; fr. May and June; 1 sheet. County: Latimer.

R. TRIVIALIS Michx.; wooded valleys, stream banks and open ground; fl. March and May; fr. April through June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

SANGUISORBA

S. ANNUA Nutt.; old fields and prairies, especially near

limestone outcrops; April and May; 1 sheet. County: Pushmataha.

LEGUMINOSAE

AMORPHA (Palmer 1931)

A. FRUTICOSA L.; banks of small streams and lakes and wooded valleys; fr. June through August; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. LAEVIGATA Nutt.; rocky banks of small streams and lower slopes of wooded hills; fr. June and July; 1 sheet. Counties: Latimer, LeFlore (Stratton 4834) and Pushmataha (Stratton 4161).

A. VIRGATA Small; wooded valleys and along streams; fr. late May through July; 1 sheet. County: LeFlore.

APIOS

A. AMERICANA Medic.; prairies, old fields, swampy sites and along streams; August through October; 1 sheet. Counties: LeFlore (Stevens 2699) and Pushmataha.

ASTRAGALUS (Barneby 1964)

A. CANADENSIS L.; low moist prairies, creek banks and wooded hillsides; May through September; 3 sheets. Counties: LeFlore and Pushmataha.

A. CRASSICARPUS Nutt., var. CRASSICARPUS; prairies, rocky slopes and old pastures; late March through May. County: Pushmataha (Summerour 9).

A. CRASSICARPUS Nutt., var. TRICHOCALYX (Nutt.) Barneby; open,

rocky woodlands to edges of prairies and old pastures; late March through June; 5 sheets. Counties: Latimer and LeFlore.

A. DISTORTUS T. & G., var. DISTORTUS; prairies, open woods and stream banks; late March through July; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

BAPTISIA
(Larisey 1940)

B. AUSTRALIS (L.) R. Br., var. MINOR (Lehm.) Fern.; prairies, old pastures and open woods; mid April through mid June. County: Latimer (Erwin 82).

B. LEUCANTHA T. & G.; prairies and meadows; May and June; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

B. LEUCOPHAEA Nutt., var. GLABRESCENS Larisey; prairies and open woods; April and May; 1 sheet. County: Pushmataha.

B. LEUCOPHAEA Nutt., var. LEUCOPHAEA; prairies and open woods; April and May; 3 sheets. Counties: Latimer and LeFlore.

B. NUTTALLIANA Small; open woods of mountain slopes on gravelly soils; May and June. Counties: LeFlore (Waterfall 17241) and Pushmataha (Stratton 4158).

B. SPHAEROCARPA Nutt.; prairies and openings in wooded valleys; April and May; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

B. STRICTA Nutt.; prairies, rocky hills; April and May. Counties: LeFlore (Waterfall 14818) and Pushmataha (Stratton 4160).

CASSIA
(Turner 1955)

C. FASCICULATA Michx., var. FASCICULATA; prairies and open woods;

June through August; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. FASCICULATA Michx., var. ROSTRATA (W. & S.) Turner; rocky hillsides and prairies; July through September; 2 sheets. Counties: LeFlore and Pushmataha.

C. MARILANDICA L.; sandy soils of prairies and lowlands; August and September. County: Pushmataha (Waterfall 193).

C. NICTITANS L.; wooded valleys and hillsides; August and September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 183).

C. OCCIDENTALIS L.; wooded valleys and along streams; August and September. County: LeFlore (Stevens 2790).

CERCIS (Hopkins 1942)

C. CANADENSIS L., var. CANADENSIS; wooded valleys, flood plains and thickets; fl. March through May; fr. June through August; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. CANADENSIS L., forma GLABRIFOLIA; wooded valleys, stream banks and shorelines; fr. May through September; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

CLITORIA

C. MARIANA L.; wooded valleys and slopes; late June through August; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

CORONILLA

C. VARIA L.; rocky forested hillsides; June. County: LeFlore

(Massey and Harrison 1704).

DALEA

D. CANDIDA Willd., var. CANDIDA; prairies and rocky hillsides; late May through July; 1 sheet. Counties: Latimer and Pushmataha (Love 167).

D. PURPUREA (Vent.) Rydb.; prairies and sandy or gravelly hillsides; June and July; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

DESMANTHUS
(Turner 1950)

D. ILLINOENSIS (Michx.) MacM.; prairies and sandy soils along streams; late June through August; 2 sheets. Counties: Latimer and LeFlore.

DESMODIUM
(Isely 1955)

D. GLUTINOSUM (Muhl.) Wood; wooded hillsides and valleys; fl. June and July; 1 sheet. County: LeFlore.

D. MARILANDICUM (L.) DC.; prairies and open woods and edge of swamps; late August through October; 1 sheet. County: LeFlore.

D. NUDIFLORUM (L.) DC.; wooded slopes, ravines and valleys; mid July through September; 1 sheet. Counties: LeFlore and Pushmataha (Waterfall 8531).

D. PANICULATUM (L.) DC., var. DILLENII (Darl.) Isely; open woods of valleys and slopes and prairies; August and September; 2 sheets. County: Pushmataha.

D. PANICULATUM (L.) DC., var. PANICULATUM; wooded hillsides and valleys; mid August through mid October. County: LeFlore (Waterfall 15190).

D. SESSILIFOLIUM (Torr.) T. & G.; prairies and open woods of valleys; late June through mid September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

D. RIGIDUM (L.) DC.; wooded hillsides to prairies; August through October; 1 sheet. Counties: Latimer and LeFlore (Waterfall 15176).

D. LAEVIGATUM (Nutt.) DC.; wooded mountain slopes and valleys; September and October. County: Pushmataha (Waterfall 10527).

GALACTIA

G. VOLUBILIS (L.) Britt., var. MISSISSIPPIENSIS Vail; wooded hillsides and valleys; late June through August; 4 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 134).

GLEDITSIA

G. TRICANTHOS L.; wooded valleys and along streams; fr. June through October; 6 sheets. Counties: Latimer and LeFlore.

LATHYRUS

L. LATIFOLIUS L.; escaped from cultivation to thickets and waste places; June through September. County: Pushmataha (Waterfall 145).

L. PUSILLUS Ell.; open woods, sandy soils and meadows; April and May. Counties: Latimer (Stratton 2521) and LeFlore (Waterfall

14851).

LESPEDEZA
(Clewell 1966)

L. CAPITATA Michx.; prairies and old fields; August and September; 1 sheet. County: Latimer.

L. CUNEATA (Dumont) G. Don; escaped from cultivation; September and October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

L. HIRTA (L.) Hornem., subsp. HIRTA; well-drained old fields and open woods; mid August through October; 2 sheets. County: LeFlore.

L. PROCUMBENS Michx.; old fields and open woods; late August through September. County: LeFlore (Stratton 3422).

L. REPENS (L.) Bart.; old fields, edge of woods and sandy to gravelly hillsides; May through October; 1 sheet. Counties: Latimer (Stratton 4870) and Pushmataha.

L. STIPULACEAE Maxim.; (introduced) prairies and open woods; July through October; 2 sheets. Counties: Latimer and Pushmataha.

L. STRIATA (Thunb.) H. & A.; (introduced) old fields and open woods; July through October. County: Pushmataha (Waterfall 347).

L. STUEVEI Nutt., forma ANGUSTIFOLIA (Britt.) Hopk.; prairies and wooded hillsides; August through October; 3 sheets. Counties: Latimer and LeFlore.

L. STUEVEI Nutt., forma STUEVEI; old fields and wooded slopes; August through October; 2 sheets. Counties: LeFlore and Pushmataha.

L. VIRGINICA (L.) Britt.; prairies, old fields and open woods; August through September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

L. VIOLACEA (L.) Pers.; old fields, prairies and open woods;
August through September; 1 sheet. County: LeFlore.

NEPTUNIA
(Turner 1951)

N. LUTEA (Leavenw.) Benth.; prairies; April through September;
4 sheets. Counties: Latimer, LeFlore and Pushmataha.

PSORALEA

P. PSORALIOIDES (Walt.) Cory, var. EGLANDULOSA (Ell.) Freeman;
prairies and open woods; late April through June; 7 sheets.
Counties: Latimer, LeFlore and Pushmataha.

P. SIMPLEX (Nutt.) T. & G.; open woods of valleys and hills;
May and June. Counties: LeFlore (Blakley 1461) and Pushmataha
(Taylor, John & Connie 4059).

P. TENUIFLORA Pursh; prairies and old fields; May through July;
3 sheets. Counties: Latimer, LeFlore and Pushmataha.

RHYNCHOSIA

R. LATIFOLIA Nutt.; wooded valleys and hillsides; mid May
through early September; 5 sheets. Counties: Latimer, LeFlore and
Pushmataha.

ROBINIA

R. PSEUDO-ACACIA L.; wooded slopes, stream banks and valleys;
fl. mid April through May; 8 sheets. Counties: Latimer, LeFlore
and Pushmataha.

SCHRANKIA

S. UNCINATA Willd.; prairies and open woods; May through July; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

STROPHOSTYLES

S. HELVOLA (L.) Ell.; prairies, along streams and open woods; late July through early October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. LEIOSPERMA (T. & G.) Piper; open woods of hillsides and prairies; late June through September. County: LeFlore (Stratton 3418).

S. UMBELLATA (Muhl.) Britt.; wooded valleys; mid July through September; 2 sheets. Counties: LeFlore and Pushmataha.

STYLOSANTHES

S. BIFLORA (L.) BSP., var. HISPIDISSIMA (Michx.) Pollard and Ball; prairies, old fields and wooded slopes; late May through September; 8 sheets. Counties: Latimer, LeFlore (Stratton 3419) and Pushmataha.

TEPHROSIA

T. ONOBRYCHOIDES Nutt.; prairies and openings in woods; June through August; 2 sheets. Counties: Latimer and Pushmataha.

T. VIRGINIANA (L.) Pers., var. HOLOSERICEA (Nutt.) T. & G.; prairies, wooded hillsides and valleys; late May through early August; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

TRIFOLIUM

T. ARVENSE L.; (naturalized) prairies, old fields and open woods; May through October; 2 sheets. Counties: Latimer and LeFlore.

T. CAROLINIANUM Michx.; old fields and prairies; April through June. County: Latimer (Standish 13).

T. DUBIUM Sibth.; (naturalized) wooded valleys and old fields; April through June; 2 sheets. Counties: Latimer and Pushmataha.

T. INCARNATUM L.; (introduced) old fields and meadows; late April and May; 2 sheets. County: LeFlore.

T. PRATENSE L.; (naturalized) hillsides and old fields; early April through September; 1 sheet. County: LeFlore.

T. REFLEXUM L.; open woods, old fields and meadows; May through August. County: Latimer (Standish 14).

VICIA

V. CAROLINIANA Walt.; wooded hillsides and valleys; April and May; 1 sheet. County: LeFlore.

V. MINUTIFLORA Dietr.; old fields, wooded valleys and slopes; April and May; 2 sheets. Counties: Latimer and LeFlore

GERANIACEAE

GERANIUM

G. CAROLINIANUM L.; open woods of hills and valleys and old fields; April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

OXALIDACEAE

OXALIS

O. CORNICULATA L.; wooded valleys, old fields and prairies; April through early June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

O. STRICTA L.; wooded hills and valleys and prairies; May through September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 617).

O. VIOLACEA L., var VIOLACEA; wooded hills and valleys and prairies; late March through early May; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

O. VIOLACEA L., forma ALBIDA Fassett; wooded hills and valleys; April and May. County: LeFlore (Waterfall 15192).

O. VIOLACEA L., var. TRICOPHORA Fassett; wooded hills and valleys; April and May; 1 sheet. Counties: Latimer (Ward 18), LeFlore and Pushmataha (Henson 239).

LINACEAE

LINUM

L. MEDIUM (Planch.) Britt., var. TEXANUM (Planch.) Fern.; prairies and wooded hills; May through July; 1 sheet. Counties: LeFlore and Pushmataha (Waterfall 605).

L. SULCATUM Riddell; prairies; June and July; 1 sheet. County: Pushmataha.

ZYGOPHYLLACEAE

TRIBULUS

T. TERRESTRIS L.; disturbed sites, waste areas; 4 sheets.

Counties: Latimer, LeFlore and Pushmataha.

RUTACEAE

PTELEA

P. TRIFOLIATA L., var. TRIFOLIATA; wooded hills and creek valleys; fr. May through August. Counties: LeFlore (Blakley 1458) and Pushmataha (Dreessen 258).

MELIACEAE

MELIA

M. AZEDERACH L.; rocky wooded hillsides; May through July; 1 sheet. County: LeFlore.

POLYGALACEAE

POLYGALA
(Fernald 1948b)

P. INCARNATA L.; prairies; June through August; 4 sheets.
Counties: Latimer and Pushmataha.

P. SANGUINEA L.; prairies and open woods; May through July; 5 sheets. Counties: Latimer, LeFlore (Waterfall 8105) and Pushmataha.

P. VERTICILLATA L., var. ISOCYCLA Fern.; wooded hills and

valleys; June through August; 4 sheets. Counties: Latimer and LeFlore.

P. VERTICILLATA L., var. *SPHENOSTACHYA* Pennell; wooded hills and valleys; June and July; 2 sheets. County: Pushmataha.

P. POLYGAMA Walt., var. *OBTUSATA* Chodat; wooded hills and valleys; April and May; 1 sheet. County: LeFlore.

EUPHORBIACEAE

ACALYPHA (Weatherby 1927)

A. GRACILENS Gray, var. *FRASERI* (Muell. Arg.) Weath.; wooded hills and prairies; late April through September; 1 sheet. County: Latimer.

A. GRACILENS Gray, var. *GRACILENS*; wooded hills and meadows; late April through September; 1 sheet. County: Latimer.

A. GRACILENS Gray, var. *MONOCOCCA* Engelm.; wooded hills and prairies; late April through September; 1 sheet. County: LeFlore.

A. VIRGINICA L.; prairies and wooded hills; July through October; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

ANDRACHNE

A. PHYLLANTHOIDES (Nutt.) Coulter; rocky stream banks; fl. May and June; 1 sheet. Counties: Latimer (Waterfall 17171) and Pushmataha.

CNIDOSCOLUS

C. TEXANUS (Muell. Arg.) Small; wooded valleys and old fields; May through August; 1 sheet. County: Pushmataha.

CROTON
(Ferguson 1901)

C. CAPITATUS Michx., var. CAPITATUS; prairies and wooded valleys; June through October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. CAPITATUS Michx., var. LINDHEIMERI (Engelm. and Gray) Muell. Arg.; July through mid October; 1 sheet. Counties: Latimer (Waterfall 8548), LeFlore and Pushmataha (Waterfall 8522).

C. GLANDULOSUS L., var. SEPTENTRIONALIS Muell. Arg.; prairies and clearings of wooded valleys; June through October; 2 sheets. Counties: Latimer and Pushmataha.

C. LINDHEIMERIANUS Scheele; prairies, old fields and waste places; mid June through early October; 1 sheet. County: LeFlore.

C. MONANTHOGYNUS Michx.; gravelly soils, stream banks and wooded hills; July through early October; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

CROTONOPSIS

C. LINEARIS Michx.; wooded hills and valleys; July through September; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 7661).

EUPHORBIA
(Wheeler 1941)

E. COROLLATA L., var. PANICULATA (Ell.) Boiss.; prairies, wooded hills and valleys; May through August; 4 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 174).

E. DENTATA Michx., forma DENTATA; wooded hills and valleys;

May through September; 1 sheet. County: Latimer.

E. HETEROPHYLLA L., var. GRAMINIFOLIA (Michx.) Engelm.; wooded hills and valleys; July through October; 2 sheets. County: LeFlore.

E. HETEROPHYLLA L., var. HETEROPHYLLA; wooded valleys and hills; June through October; 1 sheet. County: Pushmataha.

E. MISSURICA Raf.; wooded hills, waste areas and prairies; June through mid October; 1 sheet. County: Latimer.

E. NUTANS Lag.; prairies, wooded valleys and hills; August through October; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

E. OBTUSATA Pursh; wooded valleys and hills; April and May; 3 sheets. Counties: Latimer and Pushmataha.

E. PROSTRATA Ait.; wooded hills and valleys; August; 1 sheet. County: LeFlore.

E. SPATHULATA Lam.; wooded hills and valleys; May and June; 4 sheets. Counties: Latimer and Pushmataha.

E. SUPINA Raf.; wooded hills and valleys and along streams; late July through October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

E. TETRAPORA Engelm.; wooded valleys and hills; April and May; 5 sheets. Counties: Latimer and Pushmataha.

PHYLLANTHUS

P. CAROLINIENSIS Walt.; wooded valley and stream banks; August through October; 1 sheet. County: Pushmataha.

STILLINGIA

S. SYLVATICA L.; prairies and open woods; May and June; 1 sheet.

Counties: LeFlore (McMillin 60) and Pushmataha.

TRAGIA

T. BETONICIFOLIA Nutt.; open woods and fields; May through September; 2 sheets. Counties: Latimer, LeFlore (Hopkins & Nelson 524) and Pushmataha.

CALLITRICHACEAE

CALLITRICHE

C. HETEROPHYLLA Pursh; shallow water of ponds and streams; late March through June; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

ANACARDIACEAE

RHUS

R. AROMATICA Ait., var. AROMATICA; wooded hills and valleys and fence rows; May and June; 4 sheets. Counties: Latimer and LeFlore (Sooter 131).

R. COPALLINA L., var. LATIFOLIA Engler.; wooded hills and valleys and edges of prairies; fr. June through September; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. GLABRA L.; wooded hills, valleys, old fields and along prairies; fr. June through September; 10 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. RADICANS L., var. RADICANS, forma MALACOTRICHOCARPA (A. H. Moore) Fern.; open pastures, wooded hills and valleys; fr. late May

through September; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. TOXICODENDRON L., forma TOXICODENDRON; wooded hills and valleys and along streams; fl. April and May; 2 sheets. Counties: LeFlore and Pushmataha.

AQUIFOLIACEAE

ILEX

I. DECIDUA Walt.; wooded hills and valleys; fr. July through October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

I. OPACA Ait.; densely wooded river valleys, wet sandy soils near edge of streams; fl. April and May; 3 sheets. Counties: LeFlore and Pushmataha.

CELASTRACEAE

EUONYMUS

E. AMERICANA L.; moist sites of wooded hills and valleys; May and June; 3 sheets. Counties: LeFlore and Pushmataha.

E. ATROPURPUREUS Jacq.; wooded valleys and hills; fl. May and June; 1 sheet. Counties: Latimer (O. M. C. sin. num.) and LeFlore

STAPHYLEACEAE

STAPHYLEA

S. TRIFOLIA L., wooded valleys and hills, along streams; fr. May through August; 1 sheet. County: LeFlore.

ACERACEAE

ACER

A. NEGUNDO L., var. NEGUNDO; wooded valleys and hills; May through September; 5 sheets. Counties: Latimer and LeFlore.

A. RUBRUM L.; wooded valleys and hills; April and early May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. SACCHARUM Marsh.; wooded hills and valleys; fr. May and June; 3 sheets. Counties: LeFlore and Pushmataha.

A. SACCHARINUM L.; wooded valleys and hills; late March and April; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

HIPPOCASTANACEAE

AESCULUS

A. GLABRA Willd.; wooded hills and valleys; fl. April and May; fr. June through August; 2 sheets. Counties: Latimer (Hooser 53) and LeFlore.

SAPINDACEAE

SAPINDUS

S. DRUMMONDII H. & A.; stream banks and wooded valleys; fl. June; fr. July through October; 2 sheets. Counties: Latimer and Pushmataha.

BALSAMINACEAE

IMPATIENS

I. CAPENSIS Meerb. (including I. BIFLORA Walt.); densely wooded hills and valleys; May through July; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

RHAMNACEAE

BERCHEMIA

B. SCANDENS (Hill.) K. Koch; open woods, valleys and old pastures and swampy sites; fr. June through October. County: LeFlore (Stevens 2737).

CEANOTHUS

C. AMERICANUS L., edge of prairies and wooded hills; May and June; 2 sheets. County: LeFlore.

C. HERBACEUS Raf., var. PUBESCENS (T. & G.) Shinnars; wooded hills and valleys, old fields and along streams; fl. April to late May; 8 sheets. Counties: Latimer and LeFlore.

RHAMNUS

R. CAROLINIANA Walt.; wooded valleys and hills; June through September; 2 sheets. Counties: Latimer and Pushmataha.

VITACEAE

AMPELOPSIS

A. ARBOREA (L.) Koehne; prairies and wooded valleys and along creek banks; fr. July through October; 2 sheets. Counties: Latimer

and LeFlore.

A. CORDATA Michx.; wooded valleys, along streams and swampy areas; June through September; 1 sheet. County: Pushmataha.

CISSUS

C. INCISA (Nutt.) Des Moulins; wooded bluffs, open woods and edge of meadows; July through September. County: Latimer (Wallis 7523).

PARTHENOCISSUS

P. QUINQUEFOLIA (L.) Planch, forma HIRSUTA (Donn) Fern.; wooded hills and valleys; June through September; 1 sheet. County: Latimer.

P. QUINQUEFOLIA (L.) Planch, forma QUINQUEFOLIA; wooded hills and valleys and stream banks; June through October; 3 sheets. Counties: LeFlore and Pushmataha.

VITIS

V. ACERIFOLIA Raf.; wooded hills, valleys and stream banks; fl. April and May; fr. June through July; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. CINEREA Engelm.; wooded valleys and along streams; fr. late May through July; 2 sheets. Counties: LeFlore (Stevens 2701) and Pushmataha.

V. AESTIVALIS Michx.; wooded hills and valleys; June through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. ROTUNDIFOLIA Michx.; wooded hills and valleys; fr. July

and August; 7 sheets. Counties: LeFlore and Pushmataha.

V. RUPESTRIS Scheele; wooded hills and valleys; fl. May; fr. June; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. VULPINA L.; wooded hills and valleys; fr. July and August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

TILIACEAE

TILIA (Sargent 1922)

T. AMERICANA L.; wooded lower slopes of hills and along streams; fr. mature in September. County: LeFlore (Waterfall 2174a).

T. NEGLECTA Spach; wooded valleys and along creeks or rivers; June through August; 1 sheet. Counties: LeFlore and Pushmataha (Waterfall 7658).

T. NUDA Sarg., var. GLAUDESCENS; wet woods and along streams; fl. June; fr. in September; 2 sheets. County: LeFlore.

MALVACEAE

ABUTILON (Kearney 1955)

A. THEOPHRASTI Medic.; old fields, waste places and disturbed sites; July through October; 2 sheets. Counties: Latimer and Pushmataha.

CALLIRHOE (Waterfall 1951)

C. ALCAEOIDES (Michx.) Gray; prairies and old fields; late April and May; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. DIGITATA Nutt., var. STIPULATA Waterfall; prairies and open woods; May and June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

HIBISCUS

H. LASIOCARPOS Cav.; drainage ditches, valleys, old fields and swampy sites; June through August; 5 sheets. Counties: Latimer and LeFlore.

H. MILITARIS Cav.; swampy areas, ditches and small streams; June through August; 1 sheet. County: Pushmataha.

MALVA

M. ROTUNDIFOLIA L.; old fields and meadows; late April through July. County: Latimer (Erwin 62).

SIDA

S. RHOMBIFOLIA L.; wooded hills; July and August; 1 sheet. County: LeFlore.

S. SPINOSA L.; open fields, valleys, along streams and prairies; June through September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

GUTTIFERAE (Incl. HYPERICACEAE)

ASCYRUM

A. HYPERICOIDES L., var. HYPERICOIDES; wooded valleys, along streams and swampy sites; late June through October; 7 sheets.

Counties: Latimer, LeFlore and Pushmataha.

HYPERICUM

H. DENSIFLORUM Pursh incl. var. LOBOCARPUM (Gatt.) Svens., and H. OKLAHOMENSE E. J. Palmer⁷; wooded hills and valleys and along streams; late June through September; 4 sheets. Counties: Latimer (Waterfall 8547), LeFlore and Pushmataha.

H. DRUMMONDII (Grev. & Hook.) T. & G.; edge of prairies, open woods, hillsides and valleys; late July through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

H. GENTIANOIDES (L.) BSP.; rocky hills and open woods; July and August; 1 sheet. County: LeFlore.

H. MUTILUM L.; wooded valleys and along streams; July through September; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

H. PSEUDOMACUTATUM Bush; open woods of valleys and along streams; May and June; 4 sheets. Counties: Latimer and LeFlore.

H. PUNCTATUM Lam.; wooded valleys, old fields and along streams; late June through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

H. SPATHULATUM (Spach) Steud.; wooded valleys, stream banks and wooded slopes; late June through August; 6 sheets. County: LeFlore.

H. TUBULOSUM Walt.; wooded valley along streams; October. County: LeFlore. (Waterfall 17153).

GISTACEAE

LECHEA
(Wilbur 1966)

L. MUCRONATA Raf. (L. VILLOSA Ell.); wooded hillsides, valleys and prairies; late May through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

L. TENUIFOLIA Michx.; rocky hills and valleys; June and early July; 2 sheets. Counties: Latimer (Wallis 7522) and Pushmataha.

VIOLACEAE

VIOLA
(Russell 1965)

V. KITIAIBELIANA R. & S., var. RAFINESQUII (Greene) Fern.; rocky slopes, wooded hills and valleys and open woods; March and April; 5 sheets. Counties: LeFlore and Pushmataha.

V. LANGLOISII Greene; prairies; April; 1 sheet. County: Pushmataha.

V. LOVELLIANA Brainard^c; wooded hills and shaded creek valleys; late March and April; 1 sheet. County: Latimer.

V. MISSOURIENSIS Greene; wooded creek banks and valleys; April; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. PAPILIONACEA Pursh; wooded valleys, stream banks and wooded slopes; April and May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. PEDATA L., var. LINEARILOBA D. C.; wooded hills and valleys and prairies; late March and April; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. PEDATA L., var. PEDATA; wooded valleys and hills; April;

2 sheets. Counties: Latimer and Pushmataha.

V. PENSYLVANICA Michx., var. PENSYLVANICA; wooded valleys and along streams; April; 3 sheets. Counties: Latimer, LeFlore (Henson 220) and Pushmataha.

V. PENSYLVANICA Michx., var. LEIOCARPA (Fern. & Wieg.) Fern.; wooded valleys and along streams; April; 2 sheets. Counties: Latimer and LeFlore.

V. PRIMULIFOLIA L., var. PRIMULIFOLIA; rocky stream banks and valleys; April. Counties: LeFlore (Stevens 1378) and Pushmataha (Waterfall 17213).

V. PRIMULIFOLIA L., var. VILLOSA A. Eaton; stream banks and wooded valleys; April. County: LeFlore (Clark 3573).

V. SAGITTATA Ait.; prairies, hills and wooded valleys; April; 2 sheets. Counties: LeFlore (Mahler 518) and Pushmataha.

V. SORORIA Willd.; prairies to wooded valleys and hills; late March and April; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. TRILOBA Schw., var. DILATATA (Ell.) Brainard; wooded valleys and hills; April; 2 sheets. Counties: Latimer and LeFlore.

V. VILLOSA Walt.; wooded hills and banks of small streams; late March and April. County: Latimer (Waterfall 15964).

PASSIFLORACEAE

PASSIFLORA (Waterfall 1950)

P. INCARNATA L., forma ALBA Waterfall; prairies, open woods; June through August; 1 sheet. Counties: Latimer (Clark 2861) and

Pushmataha.

P. INCARNATA L., forma INCARNATA; prairies to open woods of valleys; June through September; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. LUTEA L., var. GLABRIFLORA Fern.; wooded valleys along streams; June through September; 3 sheets. Counties: LeFlore and Pushmataha.

CACTACEAE
(Britton and Rose 1919-1923)

OPUNTIA

O. COMPRESSA (Salisb.) Macbr.; occasional plant of open woods or dry prairie; May; 1 sheet. County: Pushmataha.

O. TORTISPINA Engelm.; occasional plant of prairie or old pasture; fr. July through October; 1 sheet. County: LeFlore.

LYTHRACEAE

LYTHRUM
(McCoy 1954)

L. ALATUM Pursh, var. ALATUM; prairies and grassy clearings; late June through August; 1 sheet. County: Latimer.

PEPLIS

P. DIANDRA Nutt.; shallow water and edge of reservoir; July. County: LeFlore (Penfound 282b).

RODALA

R. RAMOSIOR (L.) Koehne, var. INTERIOR Fern. & Grisc.; wet

stream banks and shallow water of ponds and lakes; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

MELASTOMACEAE

RHEXTIA

R. INTERIOR Pennell; prairies and stream valleys; late June through early October; 3 sheets. Counties: Latimer (Wallis 7530), LeFlore and Pushmataha.

ONAGRACEAE (Munz 1965)

GAURA

G. FILIFORMIS Small; prairies, valleys and open woods; late May through September; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

G. SINUATA Nutt.; old fields, prairies; late April through July; 1 sheet. County: LeFlore.

JUSSIAEA

J. DECURRENS (Walt.) DC.; stream banks, wet sites of valleys and shallow water; late August through mid October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

J. PEPOIDES (HBK.) Raven, var. GLABRESCENS (Ktze.) Shinnery; shallow water of lakes, ponds or small streams; June through August; 3 sheets. Counties: Latimer and Pushmataha.

LUDWIGIA

L. ALTERNIFOLIA L., var. ALTERNIFOLIA; wooded valleys and along streams; June through October; 2 sheets. Counties: Latimer and Pushmataha.

L. ALTERNIFOLIA L., var. PUBESCENS Palmer and Steyerl.; moist woods and prairies and along streams; June through early October; 4 sheets. Counties: Latimer and Pushmataha.

L. GLANDULOSA Walt., var. GLANDULOSA; prairies, old pastures, open woods and along water's edge; late June through September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

L. GLANDULOSA Walt., var. TORREYI Munz; wet native prairie and near shallow water; late June through September; 1 sheet. County: Latimer.

L. PALUSTRIS (L.) Ell., var. AMERICANA (DC.) Fern. & Griseb.; shallow water of ponds, lakes and streams; mid July through September; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

OENOTHERA

O. BIENNIS L., var. CANESCENS T. & G.; wet open woods, valleys and old fields; August through October; 2 sheets. Counties: Latimer and Pushmataha.

O. BIENNIS L., var. HIRSUTISSIMA Gray; old fields, open woods and valleys; August through October; 1 sheet. County: LeFlore.

O. FRUTICOSA L.; wooded hills and valleys; late April and May; 2 sheets. Counties: LeFlore and Pushmataha.

O. LACINIATA Hill, var. LACINIATA; wooded hills, valleys and prairies; late April through June; 11 sheets. Counties: Latimer,

LeFlore and Pushmataha.

O. LINIFOLIA Nutt.; prairies and wooded hillsides; May through June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

O. SPECIOSA Nutt.; prairies, open woods and old fields; late April to early June; 7 sheets. Counties: Latimer and LeFlore.

HALORAGACEAE

MYRIOPHYLLUM

M. BRASILIENSE Camb.; shallow waters of streams and ponds; late April through June; 1 sheet. County: Latimer.

M. HETEROPHYLLUM Michx.; streams, ponds and shallow lakes; June and July; 2 sheets. Counties: LeFlore and Pushmataha.

M. PINNATUM (Walt.) BSP.; shallow pools of streams and ponds; May and June; 1 sheet. County: Latimer.

PROSERPINACA

P. PALUSTRIS L., var. CREBRA Fern. & Griseb.; shallow water of streams; June and July; 1 sheet. County: Pushmataha.

UMBELLIFERAE

(Mathias and Constance 1945)

AMMOSELINUM

A. BUTLERI (Engelm.) Coult. & Rose; prairies, valleys and hills; late April through June. Counties: Latimer (Erwin 63) and Pushmataha (Waterfall 15282).

CHAEROPHYLLUM

C. TAINTURIERI Hook., var. TAINTURIERI; wooded hills and valleys and old fields; late March through May; 5 sheets. Counties: Latimer and LeFlore.

C. TEXANUM Coult. & Rose; wooded hills to open prairies; May; 1 sheet. County: Latimer.

CICUTA

C. MACULATA L.; wet sites of prairies and wooded valleys; late May through July; 3 sheets. Counties: Latimer and Pushmataha.

CRYPTOTAENIA

C. CANADENSIS (L.) DC.; wooded valleys and low damp areas; June and July; 1 sheet. County: Latimer.

CYNOSCIADIUM

C. DIGITATUM DC.; wooded valleys and wet prairies to swampy sites; late May through June; 2 sheets. Counties: Latimer and Pushmataha.

DAUCUS

D. PUSILLUS Michx.; prairies, old fields and open woods; late May and June; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

ERYNGIUM

E. PROSTRATUM Nutt.; edge of swamps or ponds and low wet sites; late May through July; 1 sheet. Counties: LeFlore and Pushmataha

(Waterfall 332a).

E. YUCCIFOLIUM Michx., var. SYNCHAETUM Gray; moist sites of prairies; July and August; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

HYDROCOTYLE

H. VERTICILLATA Thunb.; shallow water of small streams; fl. June and July; 1 sheet. County: LeFlore.

LIMNOSCIADUM

L. PINNATUM (DC.) Math. & Const.; wet prairies, edges of streams or swampy sites; June and July. County: Pushmataha (Bebb 5505).

OSMORPHIZA

O. LONGISTYLIS (Torr.) DC., var. VILLICAULIS Fern.; wooded hills and valleys; May and June; 1 sheet. County: LeFlore.

POLYTAENIA

P. NUTTALLII DC., var. NUTTALLII; prairies and old fields; late April through June; 5 sheets. Counties: Latimer and LeFlore.

PTILIMNIUM

P. CAPILLACEUM (Michx.) Raf.; prairies, old fields and swampy sites; June through August; 2 sheets. Counties: Latimer and Pushmataha (Waterfall 12444).

P. NUTTALLII (DC.) Britt.; prairies, old fields and open woods;

late May through August; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

SANICULA

S. CANADENSIS L.; open woods of valleys and hills; late May through July; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

SPERMOLEPIS

S. ECHINATA (Nutt.) Heller; old fields, disturbed sites and prairies to open woods; late May and June; 1 sheet. County: Latimer.

S. INERMIS (Nutt.) Math. & Const.; wooded hills, waste places and old fields; May and June; 1 sheet. County: Latimer.

THASPIUM

T. BARBINODE (Michx.) Nutt.; wooded hills and valleys; mid May through mid August; 1 sheet. County: LeFlore.

TREPOCARPUS

T. AETHUSAE Nutt.; wooded valleys and stream banks; June and July; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Sellers 85).

ZIZIA

Z. AUREA (L.) Koch; wooded valleys and open woods of hillsides; June through September; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

CORNACEAE

CORNUS

C. DRUMMONDII Meyer; wooded hills and valleys and along streams;
fl. May and early June; fr. June through September; 3 sheets.

Counties: Latimer (Wallis 7536), LeFlore and Pushmataha.

C. FLORIDA L., forma FLORIDA; wooded hills and valleys; fl.
in April; fr. May through September; 7 sheets. Counties: Latimer,
LeFlore and Pushmataha.

C. OBLIQUA Raf.; wooded hills and valleys; fl. late April and
May; fr. May through August; 7 sheets. Counties: Latimer, LeFlore
and Pushmataha.

NYSSACEAE

NYSSA

N. SYLVATICA Marsh; wooded valleys, often near a stream; fr.
June through October; 5 sheets. Counties: Latimer (Standish 32),
LeFlore and Pushmataha.

ERICACEAE

LYONIA

L. LIGUISTRINA DC., var. SALICIFOLIA (Wats.) DC.; along bluffs
and wooded valleys; fl. April and May; Counties: LeFlore (Stevens
2654) and Pushmataha (Waterfall 13023).

RHODODENDRON

R. OBLONGIFOLIUM (Small) Millais; wooded valleys and mountain sides; fl. May and June; 6 sheets. Counties: LeFlore and Pushmataha.

VACCINIUM

V. ARBOREUM Marsh.; edges of prairies and wooded hills and valleys; fl. April and May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. STAMINEUM L.; wooded hills and valleys; fl. late April and May; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. VACILLANS Torr.; wooded hills and valleys; fl. April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. VIRGATUM Ait.; wooded hills and valleys; fl. April and May. County: Pushmataha (Board 186).

PRIMULACEAE

DODECATHEON

D. MEDIA L.; wooded hills and ridges to prairies; April and May; 1 sheet. Counties: Latimer (Sttute 112), LeFlore and Pushmataha (Hopkins and Cross 1461).

HOTTONIA

H. INFLATA Ell.; shallow lakes, streams and swamps. County: LeFlore (Whitmire sin. num.).

LYSIMACHIA

L. LANCEOLATA Walt.; wooded hills and valleys to edges of lake and streams; 3 sheets. Counties: LeFlore and Pushmataha.

SAPOTACEAE

BUMELIA

B. LANUGINOSA (Michx.) Pers.; open woods of hills and valleys; fl. June and July; 1 sheet. Counties: Latimer and LeFlore (Stevens 2628).

EBENACEAE

DIOSPYROS

D. VIRGINIANA L., var. PUBESCENS (Pursh) Dippell; wooded hills and valleys; fl. late April and May; 1 sheet. County: Latimer.

D. VIRGINIANA L., var. VIRGINIANA; fence rows, wooded hills and valleys; fl. late April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

STYRACACEAE

HALESIA

H. CAROLINA L.; wooded valleys and hills; fl. April; 1 sheet. Counties: LeFlore (Little and Olmstead 648) and Pushmataha.

OLEACEAE

CHIONANTHUS

C. VIRGINICUS L.; wooded hills, ridges and valleys; April and May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

FRAXINUS

F. AMERICANA L., var. AMERICANA; wooded hills and valleys; fr. May through September; 8 sheets. Counties: Latimer and Pushmataha.

F. PENNSYLVANICA Marsh., var. SUBINTEGERRIMA (Vahl) Fern.; wooded hills and valleys; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

LOGANIACEAE

CYNDOCTONUM

C. MITREOLA (L.) Britt.; wooded valleys and along streams and lakes; July through October; 1 sheet. County: Pushmataha.

POLYPREMUM

P. PROCUMBENS L.; moist sandy soils and along ponds and streams; July through mid October. County: Pushmataha. (Waterfall 11149).

SPIGELIA

S. MARILANDICA L.; wooded valleys and stream banks; 3 sheets. County: LeFlore.

GENTIANACEAE

GENTIANA

G. SAPONARIA L.; valleys and along streams; October. County: LeFlore (Robbins 3200).

SABATIA

S. ANGULARIS (L.) Pursh, forma ANGULARIS; wooded hills and valleys to prairies; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 326).

S. CAMPESTRIS Nutt., forma ALBIFLORA D. M. Moore; prairies; June and July; 1 sheet. County: Latimer.

S. CAMPESTRIS Nutt., forma CAMPESTRIS; prairies; June and July; 5 sheets. Counties: Latimer and Pushmataha.

APOCYNACEAE

AMSONIA

A. ILLUSTRIS Woodson; wooded valleys and along edges of streams and swampy sites; April and May. County: Latimer (Summerour 51).

A. TABERNAEMONTANA Walt.; wooded valleys and hills and along streams; April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 9343).

APOCYNUM

A. CANNABINUM L., var. GLABERRIMUM A. DC.; prairies; fl. May and June; 2 sheets. Counties: LeFlore and Pushmataha.

TRACHELOSPERMUM

T. DIFFORME (Walt.) Gray; wooded valleys, along streams and flood plains; fl. May and June; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

ASCLEPIADACEAE

ASCLEPIAS
(Woodson 1954)

A. AMPLEXICAULE J. E. Sm.; prairies; May; 1 sheet. County: LeFlore.

A. QUADRIFOLIA Jacq.; wooded hills and valleys; late April and May; 1 sheet. Counties: Latimer and LeFlore (Waterfall 14820).

A. HIRTELLA (Pennell) Woodson; prairies; May through August; 6 sheets. Counties: LeFlore and Pushmataha.

A. OBOVATA Ell.; prairies; July and August. County: Pushmataha (Waterfall 8525).

A. SYRIACA L.; wooded hills and valleys; May through July; 3 sheets. County: LeFlore.

A. TUBEROSA L.; prairies, wooded valleys and old fields; May through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. VERTICILLATA L.; wooded hills and valleys to meadows; late May through August; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. VIRIDIFLORA Raf., var. LANCEOLATA (Ives) Torr.; prairies and old fields; June through August; 1 sheet. County: Latimer.

A. VIRIDIFLORA Raf., var. VIRIDIFLORA; prairies, old fields and overgrazed sites; June through August; 1 sheet. County: Latimer.

A. VIRIDIS Walt.; prairies; May through July; 7 sheets.
Counties: Latimer, LeFlore and Pushmataha.

MATELEA

M. BALDWINIANUS (Sweet) Woodson; wooded hills and valleys; late May through June; 2 sheets. County: LeFlore.

M. GONOCARPA (Walt.) Shinnery; wooded valleys and hills; June and July; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 721).

CONVOLVULACEAE

CONVOLVULUS

C. ARVENSIS L.; old fields and hillsides; May through August.
County: Pushmataha (Waterfall 144).

CUSCUTA (Yuncker 1943)

C. CAMPESTRIS Yuncker; prairies, hills and wooded valleys; July through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. COMPACTA Juss.; wooded valleys and stream banks; September and October. County: LeFlore (Stevens 2641).

C. CUSPIDATA Engelm.; prairies, hills, disturbed sites and valleys; late June through September; 6 sheets. Counties: Latimer LeFlore and Pushmataha.

C. GLABRIOR (Engelm.) Yuncker; wooded valleys, open woods and old fields; June through August; 2 sheets. Counties: Latimer and

Pushmataha.

C. GLOMERATA Choisy; stream valleys, wet prairies and old fields; June through mid October; 1 sheet. County: LeFlore.

C. INDECORA Choisy; wooded valleys and hills to prairies; 3 sheets. Counties: Latimer and Pushmataha.

IPOMOEAE
(House 1908)

I. HEDERACEA (L.) Jacq., var. INTEGRIUSCULA Gray; wooded hills, fields and river valleys; May through September; 1 sheet. County: Latimer.

I. PANDURATA (L.) G. F. W. Mey.; prairies, hills and valleys; June through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

I. LACUNOSA L.; wooded valleys and edge of prairies; July through October; 1 sheet. County: Pushmataha.

I. PURPUREA (L.) Roth.; wooded valleys and hills; July through September. County: Pushmataha (Waterfall 135).

I. QUAMOCLIT L.; gravelly soil of lower hills and valleys; August and September. County: Pushmataha (Waterfall 157).

POLEMONIACEAE

GILIA

G. RUBRA L.; wooded hills, disturbed sites and old fields; late May through July; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

PHLOX
(Wherry 1955)

P. CUSPIDATA Scheele; prairies; May; 1 sheet. County: Latimer.

P. PILOSA L.; wooded valleys and hills and prairies; April through early June; 11 sheets. Counties: Latimer, LeFlore and Pushmataha.

HYDROPHYLLACEAE

HYDROLEA

H. OVATA Nutt.; wet prairie sites; swampy sites and low valleys; July through October; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

H. UNIFLORA Raf.; flood plains and swampy areas; July through October; 1 sheet. County: LeFlore.

NEMOPHILA

N. PHACELIOIDES Nutt. ex. Bart.; open wooded creek valleys; late April through June; 2 sheets. Counties: Latimer (Elam 60), LeFlore and Pushmataha (Waterfall 609).

PHACELIA

P. GLABRA Nutt.; wooded hills and valleys and edge of prairies; late April through May; 2 sheets. Counties: LeFlore and Pushmataha.

P. HIRSUTA Nutt.; moist wooded valleys and hills; late April through May; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

BORAGINACEAE

CYNOGLOSSUM

C. VIRGINIANUM L.; moist wooded valleys; April and May;
Counties: LeFlore (Hopkins 2928) and Pushmataha (Negi sin. num.).

HACKELIA

H. VIRGINIANA (L.) I. M. Jtn.; wooded valleys; June and July;
1 sheet. County: Pushmataha.

HELIOTROPIMUM

H. INDICUM L.; flood plains, wooded creek banks and edge of
prairies; June through September; 3 sheets. Counties: Latimer
and LeFlore

LITHOSPERMUM

L. INCISUM Lehm.; prairies; April and May; 5 sheets. Counties:
Latimer, LeFlore and Pushmataha.

MYOSTIS

M. VERNA Nutt.; old fields, wooded valleys and prairies; April
and May; 4 sheets. Counties: Latimer and Pushmataha.

VERBENACEAE

CALLICARPA

C. AMERICANA L.; along stream banks and wooded hills; June
through August; 7 sheets. Counties: Latimer, LeFlore and
Pushmataha.

VERBENA

V. BRACTEATA Lag. & Rodr.; prairies, old fields, waste places and sandy slopes; May through August. County: LeFlore (Blakley 1462).

V. CANADENSIS (L.) Britt.; wooded hills, valleys and prairies; April and May; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. HALEI Small; sandy soils; June. Counties: LeFlore (Bebb 5398) and Pushmataha (Waterfall 631).

V. PUMILA Greene; wooded hills and ledges; April through June; 3 sheets. Counties: Latimer and Pushmataha.

V. STRICTA Vent., forma STRICTA; wooded hills; June. County: LeFlore.

V. URTICIFOLIA L.; wooded valleys, ravines and bluffs; July through October; 1 sheet. County: Latimer.

LABIATAE

AGASTACHE

A. NEPETOIDES (L.) Kuntze; wooded hills and valleys; August and September; 1 sheet. County: LeFlore.

MARRUBIUM

M. VULGARE L.; old fields, waste places, hills and valleys; May through August; 1 sheet. County: LeFlore.

MENTHA

M. SPICATA L.; wooded stream banks, old fields and waste places;

July and August. County: Pushmataha (Waterfall 132).

MONARDA
(McClintock 1942)

M. FISTULOSA L., var. FISTULOSA; wooded hills and valleys; June and July; 1 sheet. Counties: Latimer (Wallis 7532) and LeFlore.

M. PUNCTATA L., var. VILICAULIS (Pennell) Shinnery; wooded valleys and prairies; late May through September; 3 sheets. Counties: Latimer, LeFlore (Stratton 4829) and Pushmataha.

M. VIRGATA Raf.; wooded mountains; late April and May; 2 sheets. Counties: Latimer, LeFlore (Demaree 12708) and Pushmataha (Waterfall 619).

PERILLA

P. FRUTESCENS (L.) Britt.; prairies and wooded valleys; September and October; 2 sheets. Counties: Latimer and Pushmataha.

PHYSOSTEGIA

P. ANGUSTIFOLIA Fern.; prairies; June and July; 3 sheets. Counties: Latimer and LeFlore.

P. INTERMEDIA (Nutt.) Engelm. & Gray; moist wooded valley sites; May and June; 2 sheets. Counties: Latimer and Pushmataha.

P. VIRGINIANA (L.) Benth.; old fields, prairies and along streams; June through September; 3 sheets. Counties: Latimer and LeFlore.

PRUNELLA

P. VULGARIS L., var. LANCEOLATA (Bart.) Fern.; wooded valleys

and old fields; May through July; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

PYCNANTHEMUM

P. ALBESCENS T. & G.; wooded hills and prairies; July and August; 5 sheets. Counties: LeFlore and Pushmataha.

P. TENUIFOLIUM Schrad.; prairies and open woods; June through September; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

SALVIA

S. AZUREA Lam., var. *GRANDIFLORA* Benth.; prairies and hills; late June through September; 1 sheet. County: LeFlore.

S. LYRATA L.; wooded valleys and small meadows; late April through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

BLEPHILIA

B. CILIATA (L.) Benth.; wooded valleys and hills; May; 1 sheet. County: LeFlore.

CUNILA

C. ORIGANOIDES (L.) Britton; wooded hills and bluffs; September and October; Counties: LeFlore (Stevens 2685) and Pushmataha (Waterfall 10519).

HEDEOMA

H. HISPIDA Pursh; prairies and gravelly soils of hills and

valleys; late April through June; 1 sheet. County: Pushmataha.

LAMIUM

L. AMPLEXICAULE L., forma AMPLEXICAULE; prairies, open woods, old fields and waste places; March and April; 2 sheets. Counties: LeFlore and Pushmataha.

LYCOPUS

L. AMERICANUS L., var. SCABRIFOLIUS Fern.; shallow ponds and streams; August through October; 1 sheet. County: Pushmataha.

L. RUBELLUS Moench., var. RUBELLUS Fern.; shallow water and flood plains; August through October; 1 sheet. County: LeFlore.

L. VIRGINIANA L.; wooded stream banks; October; 1 sheet. Counties: LeFlore (Waterfall 15218) and Pushmataha.

SCUTELLARIA

S. ELLIPTICA Muhl.; gravelly soil of lower slopes and valleys; July. County: Pushmataha (Waterfall 133).

S. OVATA Hill; prairies, wooded valleys and hills; late May through July; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

STACHYS

S. PALUSTRIS L., var. PILOSA (Nutt.) Fern.; wooded hills and valleys; June; 1 sheet. County: LeFlore.

S. TENUIFOLIA Willd.; wooded valleys and hills; July through September; 2 sheets. Counties: Latimer and Pushmataha.

TEUCRIUM

T. CANADENSE L., var. VIRGINICUM (L.) Eat; wooded stream banks and edge of prairies; June through August; 2 sheets. Counties: Latimer and Pushmataha.

TRICHOSTEMA

T. BRACHIATUM L.; prairies; September through October; 1 sheet. County: LeFlore.

SOLANACEAE

DATURA

D. STRAMONIUM L.; old fields, disturbed prairies, open woods and waste places; July through October; 2 sheets. County: LeFlore.

PHYSALIS
(Waterfall 1966)

P. ANGULATA L., var. ANGULATA; prairies, old fields and stream valleys; July through October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. ANGULATA L., var. LANCEIFOLIA (Nees) Waterfall; old fields and moist sites; late June through September; 1 sheet. County: Latimer.

P. ANGULATA L., var. PENDULA (Rydb.) Waterfall; wooded hills and valleys and old fields; late June through mid October; 2 sheets. Counties: LeFlore and Pushmataha.

P. CORDATA Miller; sandy soils of hills and valleys; September and October. County: Pushmataha (Waterfall 159).

P. HETEROPHYLLA Nees; wooded hills, valleys and prairies; June through mid October; 4 sheets. Counties: Latimer, LeFlore (Waterfall 15179) and Pushmataha.

P. PUBESCENS L., var. *INTEGRIFOLIA* (Dunal.) Waterfall; wooded valleys and along streams; July through October; 1 sheet. County: Pushmataha.

P. PUMILA Nutt.; prairies and old fields; late April through September; 1 sheet. County: LeFlore.

P. TURBINATA Medicus; wooded hills and valleys; July through September; 1 sheet. County: Latimer.

P. VIRGINIANA Mill., var. *VIRGINIANA*; prairies, wooded hills and valleys; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 11397).

P. VISCOSA L., var. *CINERASCENS* (Dunal) Waterfall; prairies, old fields and stream valleys; late May through July; 2 sheets. County: Pushmataha.

SOLANUM

S. CAROLINENSE L., forma *ALBIFORUM* (O. Ktze) Benke; prairies, hillsides and stream valleys; late May through July; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. ELAEAGNIFOLIUM Cav., forma *ELAEAGNIFOLIUM*; prairies, old fields and disturbed sites; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. NIGRUM L., var. *AMERICANUM* (Mill.) Schulz; moist sites of valleys and hills; June through August; 1 sheet. County: LeFlore.

S. ROSTRATUM Dunal.; prairies, hills, disturbed sites and waste

places; June through September; 2 sheets. Counties: Latimer and LeFlore.

SCROPHULARIACEAE
(Pennell 1935)

BACOPA

B. ACUMINATA (Walt.) Robinson; open woods; July through October. County: Pushmataha (Waterfall 327).

B. ROTUNDIFOLIA (Michx.) Wettst.; swampy or wet sites of valleys, edges of ponds and streams; late May through August; 1 sheet. County: LeFlore.

BUCHNERA

B. AMERICANA L.; prairies and old fields; June through August; 5 sheets. Counties: Latimer and Pushmataha.

CASTILLEJA

C. COCCINEA (L.) Spreng., forma COCCINEA; prairies and open woods; April and May; 4 sheets. Counties: Latimer, LeFlore (Waterfall 8769) and Pushmataha.

C. INDIVISA Engelm.; hillsides, old fields and prairies; mid April through early June; 4 sheets. County: Pushmataha.

COLLINSIA

C. VIOLACEA Nutt.; wooded hills and valleys; April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

GERARDIA

G. FASCICULATA Ell.; wet prairie sites, old fields and edge of woods; late August through September; 4 sheets. Counties: LeFlore and Pushmataha.

G. GATTINGERI Small; wooded hills and valleys; September and October. Counties: LeFlore (Waterfall 15214) and Pushmataha (Waterfall 9852).

G. GRANDIFLORA Benth.; wooded hills, ravines and valleys; late August through October; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 13019).

G. PECTINATA (Nutt.) Benth.; wooded hills; October. County: Pushmataha (Waterfall 9847).

G. TENUIFOLIA Vahl., var. PARVIFLORA Nutt.; wooded hills, wet valleys and prairies; late July through October; 1 sheet. Counties: Latimer, LeFlore (Stratton 3411) and Pushmataha (Waterfall 11144).

GRATIOLA

G. BREVIFOLIA Raf.; shallow water of streams; June through August; 2 sheets. Counties: LeFlore and Pushmataha.

G. VIRGINIANA L.; shallow water of ponds and streams; late May through July; 3 sheets. Counties: Latimer and LeFlore.

LINARIA

L. CANADENSIS (L.) Dumont, var. TEXANA (Scheele) Pennell; prairies, old fields and wooded valleys; April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

LINDERNIA

L. ANAGALLIDEA (Michx.) Pennell; edge of ponds and wet sites of old fields and valleys; June through August; 1 sheet. County: Latimer.

L. DUBIA (L.) Pennell; moist prairie and valley sites and edge of ponds; June through August; 2 sheets. Counties: Latimer and Pushmataha.

MIMULUS

M. ALATUS Ait.; wooded valleys and swampy sites; August through October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

PEDICULARIS

P. CANADENSIS L., var. DOBSII Fern.; wooded hills and valleys; April and May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

PENSTEMON

P. ARKANSANUS Pennell; prairies, wooded hills and valleys; late April through early June; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. DIGITALIS Nutt.; old fields, prairies and wooded hills and valleys; late April through early June; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

P. TUBAEFLORUS Nutt.; prairies, wooded hills and valleys; May and June; 3 sheets. Counties: Latimer and LeFlore.

SCROPHULARIA

S. MARILANDICA L.; wooded hills and valleys; June through October. County: Pushmataha (Waterfall 179).

VERBASCUM

V. BLATTARIA L., forma *BLATTARIA*; wooded hills and valleys and old fields; May and June; 3 sheets. Counties: Latimer and LeFlore.

V. THAPSUS L.; prairies, old fields, hills and valleys; mid June through September; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

VERONICA

V. ARVENSIS L.; old fields, swampy sites and stream valleys; April and early May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

V. PEREGRINA L., var. *PEREGRINA*; wooded hills, old fields and stream valleys; April; 2 sheets. County: Latimer.

VERONICASTRUM

V. VIRGINICUM (L.) Farwell, forma *VILLOSA* (Raf.) Pennell; prairies and open woods; June through August. Counties: LeFlore (Massey & Harrison 1710) and Pushmataha (Waterfall 181).

BIGNONIACEAE

CAMPSIS

C. RADICANS (L.) Seem.; vine of wooded hills and valleys; June

through September; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

CATALPA

C. BIGNONIOIDES Walt.; occasionally in wooded hills and valleys; fl. May through July. County: LeFlore (Mason 115).

LENTIBULARIACEAE

UTRICULARIA

U. BIFLORA Lam.; shallow lakes; June through October; 2 sheets. County: Pushmataha.

ACANTHACEAE

DICLIPTERA

D. BRACHIATA (Pursh) Spreng.; swampy sites and edge of streams; August through October; 3 sheets. Counties: Latimer and Pushmataha.

JUSTICIA

J. AMERICANA (L.) Vahl.; wet prairie sites, edge of streams and ponds; May through early July; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

RUELLIA

R. HUMILIS Nutt.; prairies, wooded hills and valleys; May through August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. PEDUNCULATA Torr.; wooded valleys and hills; May through July;

2 sheets. Counties: LeFlore and Pushmataha.

R. STREPENS L., forma CLEISTANTHA (Gray) S. McCoy; wooded valleys and hills; May through October; 3 sheets. Counties: LeFlore and Pushmataha.

R. STREPENS L., forma STREPENS; wooded valleys and hills; May through September; 4 sheets. Counties: Latimer and LeFlore.

PHRYMACEAE

PHRYMA

P. LEPTOSTACHYA L.; wooded valleys; June and July; 1 sheet.
County: Pushmataha.

PLANTAGINACEAE

PLANTAGO

P. ARISTATA Michx.; prairies, waste places and open woods; May and June; 4 sheets. Counties: Latimer and Pushmataha.

P. LANCEOLATA L.; prairies, old fields and open woods; May through August. County: LeFlore (Stevens 2789).

P. RHODOSPERMA Dcne.; open woods of valleys and hills; mid April and May; 2 sheets. Counties: Latimer and Pushmataha.

P. RUGELII Dcne.; wooded hills and valleys and old fields; mid June through early October; 5 sheets. Counties: Latimer and LeFlore.

P. VIRGINICA L.; prairies, old fields and open woods; late March through June; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

RUBIACEAE

CEPHALANTHUS

C. OCCIDENTALIS L., var. OCCIDENTALIS; wooded stream banks, usually at edge of water; June through September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

DIODIA

D. TERES Walt., var. SETIFERA Fern. & Grisc.; prairies, waste places and wooded hills; June through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

D. VIRGINIANA L.; waste places, old fields and open woods; June through October; 4 sheets. Counties: Latimer (Waterfall 11221), LeFlore and Pushmataha.

GALIUM

G. APARINE L.; prairies and wooded valleys; May; 3 sheets. Counties: Latimer and Pushmataha.

G. ARKANSANUM Gray; wooded hills and valleys; June through September; 2 sheets. County: LeFlore.

G. PILOSUM Ait., var. PILOSUM; wooded hills and valleys; May through August; 1 sheet. County: Latimer.

HEDYOTIS

H. CRASSIFOLIA Raf.; prairies, hillsides and valleys; late March through April; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

H. NIGRICANS (Lam.) Fosb.; wooded hills, ravines and prairies; June through October. Counties: Latimer (Clark 3556) and LeFlore (Waterfall 15236).

H. PURPUREA (L.) T. & G., var. LONGIFOLIA (Gertn.) Fosb.; open woods of hills and valleys; April through July; 2 sheets. Counties: Latimer, LeFlore (Stevens 2667) and Pushmataha (Waterfall 11385).

H. PURPUREA (L.) T. & G., var. PURPUREA; rocky wooded hills; April through July. County: LeFlore (Stevens 1435).

MITCHELLIA

M. REPENS L.; wooded hills and valleys; June through September. Counties: LeFlore (Stevens 2780) and Pushmataha (Waterfall 10509).

CAPRIFOLIACEAE

LONICERA

L. FLAVA Sims; wooded hills; April and May. County: Latimer (Hooser 76).

L. JAPONICA Thunb.; wooded hills, ravines and valleys; May through October; 1 sheet. County: Pushmataha.

L. SEMIPERVIRENS L.; wooded hills and valleys; April and May; 2 sheets. Counties: LeFlore and Pushmataha.

SAMBUCUS

S. CANADENSIS L., var. CANADENSIS; along streams, hills and prairies; June through August; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 726).

S. CANADENSIS L., var. SUBMOLLIS Rehd.; open woods of hills and valleys; June through August; 1 sheet. County: LeFlore.

SYMPHORICARPOS

S. ORBICULATUS Moenchh.; prairies and open woods of valleys; August through October; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

VIBURNUM

V. PRUNIFOLIUM L., var. *FERRUGINEUM* T. & G.; wooded hills and valleys; fl. April and May; fr. June through October; 9 sheets. Counties: Latimer, LeFlore and Pushmataha.

VALERIANACEAE

VALERIANELLA

V. LONGIFLORA (T. & G.) Walp.; open woods; May; 2 sheets. Counties: Latimer (Waterfall 11400), LeFlore and Pushmataha.

V. NUTTALLII (T. & G.) Walp.; wooded hills; April and May; 1 sheet. Counties: Latimer, LeFlore (Hopkins & Valkenburgh 4329), and Pushmataha (Waterfall 11394).

V. RADIATA (L.) DuRoi.; prairies and open woods; May; 2 sheets. Counties: Latimer and LeFlore.

V. STENOCARPA (Engelm.) Kreh, var. *PARVIFLORA* Dyal; prairies, wooded hills and valleys; April and May; 4 sheets. Counties: Latimer and Pushmataha.

CUCURBITACEAE

MELOTHRIA

M. PENDULA L.; open woods; July through September; 2 sheets.

Counties: Latimer and Pushmataha.

CUCURBITA

C. FOETIDISSIMA HBK.; shallow prairies, old fields; July through August; 1 sheet. County: Latimer.

CAMPANULACEAE (McVaugh 1943)

LOBELIA

L. APPENDICULATA A. DC.; prairies, wooded hills and valleys; May through July; 1 sheet. Counties: LeFlore and Pushmataha (Hopkins & Valkenburgh 4314).

L. CARDINALIS L.; wooded valleys; August through September; 2 sheets. Counties: LeFlore and Pushmataha.

L. PUBERULA Michx.; slews and open woods of valleys; September and October. Counties: Latimer (Stratton 603), LeFlore (Waterfall 15232) and Pushmataha (Waterfall 11143).

L. SPICATA Lam., var. LEPTOSTACHYS (A. DC.) Mack. and Bush; prairies, wooded hills and valleys; May through July; 11 sheets. Counties: Latimer, LeFlore and Pushmataha.

SPECULARIA

S. BIFLORA (R. & P.) Fisch. & Mey.; prairies and open woods of valleys; May and June; 1 sheet. County: Pushmataha.

S. LAMPROSPERMA (McVaugh) Fern.; prairies, hills and valleys; May and June; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. LEPTOCARPA (Nutt.) Gray; prairies, old fields and hills; May

and June; 2 sheets. Counties: LeFlore (Nelson & Holland 6087) and Pushmataha.

S. PERFOLIATA (L.) A. DC.; old fields, hills and prairies; May and June; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Rose sin. num.).

COMPOSITAE

ACHILLEA

A. LANULOSA Nutt., forma LANULOSA; prairies; May and June; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

ACTINOMERIS

A. ALTERNIFOLIA (L.) DC.; wooded valleys and along streams; August through October; 1 sheet. County: Latimer.

AMBROSIA

A. ARTEMISIFOLIA L., var. ELATIOR (L.) Descourtils; open woods, prairies and waste places; August through October; 2 sheets. Counties: Latimer and LeFlore.

A. BIDENTATA Michx.; prairies, old fields and waste places; August through October; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

A. PSILOSTACHYA DC., var. LINDHEIMERIANA (Scheele) Blankenship; prairies, old fields and waste places; August through October; 1 sheet. County: Latimer.

A. TRIFIDA L., var. TEXANA Scheele; prairies, waste places and old fields; September and October; 1 sheet. Counties: Latimer and

Pushmataha.

ANTENNARIA

A. PLANTAGINIFOLIA (L.) Richards; wooded valleys and hills; late March and April; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

ANTHEMIS

A. COTULA L.; wooded valleys and hills and waste places; April through early June; 3 sheets. Counties: Latimer, LeFlore (Blakley 1459) and Pushmataha.

ARCTIUM

A. MINUS (Hill) Bernh.; waste areas, disturbed sites and meadows; June and July; 1 sheet. County: LeFlore.

ASTER

A. ANOMALUS Engelm.; wooded hills and valleys; August through October; 1 sheet. County: LeFlore.

A. AZUREUS Lindl.; wooded hills and valleys; August through October. County: LeFlore (Waterfall 15197).

A. ERICOIDES L.; prairies; July through October; 2 sheets. Counties: Latimer and Pushmataha.

A. HEMISPHERICUS Alexander; prairies and open woods; August through September. Counties: Latimer (Waterfall 8537), LeFlore (Waterfall 15194) and Pushmataha (Waterfall 311a).

A. LATERIFLORUS (L.) Britt., var. LATERIFLORUS; prairies, slews

and open woods; September and October; 1 sheet. County: Latimer.

A. PALUDOSIS Ait., var. HEMISPHERICUS (Alexand.) Waterfall; prairies and open woods; September; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 311b).

A. PATENS Ait., var. PATENISSIMUS (Lindl.) T. & G.; prairies and open woods; August through October; 2 sheets. Counties: LeFlore and Pushmataha (Waterfall 9851).

A. PRAEALTUS Poir.; wooded valleys and hills; September and October. County: LeFlore (Waterfall 15187a).

A. SAGITTIFOLIUS Wedemeyer; wooded hills and valleys; September and October; 2 sheets. Counties: LeFlore and Pushmataha.

A. TURBINELLUS Lindl.; wooded hills and valleys; September and October. Counties: LeFlore (Waterfall 15202) and Pushmataha (Waterfall 10523).

ASTRANTHIUM

A. INTEGRIFOLIUM (Michx.) Nutt.; open woods of hills and valleys; April and May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

BACCHARIS

B. HALIMIFOLIA L.; old fields and valleys; October. County: LeFlore (Waterfall 15188).

BIDENS

B. ARISTOSA (Michx.) Britt., var. MUTICA (Gray) Gattinger; prairies and open woods; October; 2 sheets. Counties: LeFlore and Pushmataha.

B. BIPINNATA L.; wooded valleys and hills; August and September; 1 sheet. Counties: LeFlore and Pushmataha (Waterfall 328).

B. DISCOIDES (T. & G.) Britton; wet wooded valleys and swamps; 1 sheet. County: LeFlore.

B. FRONDOSA L.; stream banks and wet valley sites; 1 sheet. County: Latimer.

B. POLYLEPIS Blake; edge of prairies and wooded valleys; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

BOLTONIA

B. ASTEROIDES (L.) L'Her., var. LATISQUAMA (Gray) Cronquist; wet prairie and valley sites; July and August. Counties: Latimer (Waterfall 11219) and Pushmataha (Waterfall 15184).

B. ASTEROIDES (L.) L'Her., var. RECOGNITA (Fern. & Grisc.) Cronquist; stream banks; July and August. County: Pushmataha (Waterfall 10517).

B. DIFFUSA Ell.; prairies and along stream valleys; July and August; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

CACALIA

C. PLANTAGINEA (Raf.) Shimmers; open woods and prairies; May and June; 3 sheets. Counties: Latimer and LeFlore.

CENTAUREA

C. AMERICANA Nutt.; prairies, old fields and waste places; June; 2 sheets. Counties: Latimer and Pushmataha.

CHAETOPAPPA

C. ASTEROIDES DC.; prairies, waste places and open woods; late April through June; 3 sheets. Counties: Latimer and Pushmataha.

CHRYSOPSIS
(Heterotheca in part)

C. PILOSA Nutt.; hills, valleys and edge of prairies; May through September; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

C. MICROCEPHALA Small; wooded hills and valleys; August through October. Counties: LeFlore (Stevens 2623) and Pushmataha (Waterfall 8529).

CIRSIIUM

C. ALTISSIMUM (L.) Spreng.; stream banks, old fields and wooded valleys; August through September; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 310).

C. CAROLINIANUM (Walt.) Fern.; open woods of valleys; May; 2 sheets. Counties: LeFlore and Pushmataha.

CONYZA

C. CANADENSIS (L.) Cronq., var. CANADENSIS; old fields, disturbed sites and wooded areas; August and September; 1 sheet. County: Latimer.

C. CANADENSIS (L.) Cronq., var. GLABRATA (Gray) Cronq.; edge of prairies, old fields and wooded sites; August and September; 3 sheets. Counties: LeFlore and Pushmataha.

COREOPSIS

C. GRANDIFLORA Hogg., var. GRANDIFLORA; open woods of hills and valleys; May and June; 6 sheets. Counties: LeFlore and Pushmataha.

C. GRANDIFLORA Hogg., var. HARVEYANA (Gray) Sheff; prairies and open woods; May through June; 2 sheets. Counties: Latimer and LeFlore.

C. PALMATA Nutt.; wooded hills and valleys; May and June; 1 sheet. County: LeFlore.

C. TINCTORIA Nutt., forma TINCTORIA; prairies, and old fields; June through September; 1 sheet. Counties: Latimer and Pushmataha (Love 158).

C. TRIPTERIS L.; prairies and open woods; August through October; 1 sheet. Counties: Latimer, LeFlore (Stevens 2703) and Pushmataha (Waterfall 312).

CREPIS

C. PULCHRA L.; open woods; May. County: Latimer (Waterfall 14814).

ECHINACEA

E. ANGUSTIFOLIA DC., var. ANGUSTIFOLIA; prairies; May through June; 1 sheet. County: Latimer.

E. ANGUSTIFOLIA DC., var. STRIGOSA McGregor; prairies; May through July; 1 sheet. County: Latimer.

E. PALLIDA Nutt.; prairies; May through July; 3 sheets. Counties: Latimer and LeFlore.

E. PURPUREA (L.) Moench.; wooded hills and valleys; May through July; 2 sheets. County: LeFlore.

ECLIPTA

E. ALBA (L.) Hassk.; shallow water and moist sites; late June through early October; 1 sheet. County: LeFlore.

ELEPHANTOPUS

E. CAROLINIANUS Willd.; wooded hills and valleys and woodland meadows; August through October; 4 sheets. Counties: Latimer and Pushmataha.

ERECHTITES

E. HIERACIFOLIA Raf., var. *PRAEALTA* (Raf.) Fern.; wooded hills and valleys; September and October. County: LeFlore (Waterfall 15230).

ERIGERON
(Cronquist 1947)

E. PULCHELLUS Michx.; wooded valleys and hills; late April and May. County: LeFlore (Waterfall 14855).

E. STRIGOSUS Muhl. ex. Willd.; edge of prairies and open woods; May and June. County: LeFlore (Blakley 1414).

E. TENUIS T. & G.; prairies and open woods of valleys; April and May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

EUPATORIUM

E. COELESTINUM L.; flood plains, valleys and edge of prairies; August through September; 1 sheet. County: Pushmataha.

E. INCARNATUM Walt.; wooded hills and valleys; August through

October; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

E. PERFOLIATUM L.; moist wooded valleys; August through October.
County: Latimer (Waterfall 10540).

E. RUGOSUM Houtt.; open woods of valleys; August through mid
October; 1 sheet. Counties: LeFlore (Hopkins 5594) and Pushmataha.

E. SEROTINUM Michx.; open woods of valleys and prairies; August
through October; 3 sheets. Counties: Latimer, LeFlore and
Pushmataha.

FACELIS

F. APICULATA Cass.; open woods of hills and valleys; April.
County: Pushmataha (Waterfall 15252).

GAILLARDIA

G. LANCEOLATA Michx., var. FASTIGIATA (Greene) Waterfall;
prairies; late May through July; 7 sheets. Counties: Latimer,
LeFlore and Pushmataha.

G. SEROTINUM (Walt.) H. Rock; prairies and open woods; May
through October; 1 sheet. County: LeFlore.

GNAPHALIUM

G. OBTUSIFOLIUM L.; prairies, wooded valleys and hills; September
and October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha.

G. PURPUREUM L.; prairies and open woods; May and June; 4 sheets.
Counties: Latimer, LeFlore and Pushmataha.

GRINDELIA

G. LANCEOLATA Nutt.; prairies; August and September; 3 sheets.

Counties: Latimer and LeFlore.

HAPLOPAPPUS

H. DIVARICATUS (Nutt.) Gray, var. DIVARICATUS; old fields and prairies; October. County: Pushmataha (Waterfall 11147).

HELENIUM

H. AMARUM Raf., var. AMARUM; disturbed prairies and open woods of hills; June through October; 3 sheets. Counties: LeFlore and Pushmataha.

H. FLEXUOSUM Raf.; prairies and old fields; late May through July; 2 sheets. Counties: LeFlore and Pushmataha.

HELIANTHUS

H. ANGUSTIFOLIUS L.; open woods and wet prairie sites; October. Counties: Latimer (Waterfall 15175), LeFlore (Waterfall 15177) and Pushmataha (Waterfall 11145).

H. ANNUUS L.; open woods and old fields; late June through September; 1 sheet. County: LeFlore.

H. HIRSUTUS Raf., var. TRACHYPHYLLUS T. & G.; prairie sites and open woods; late June through October; 3 sheets. Counties: Latimer and LeFlore.

H. HIRSUTUS Raf., var. STENOPHYLLUS T. & G.; prairies and open woods; late June through October; 4 sheets. Counties: Latimer and LeFlore.

H. MOLLIS Lam.; prairies; July through September; 5 sheets.

Counties: Latimer, LeFlore and Pushmataha.

HELIOPSIS

H. HELIANTHOIDES (L.) Sweet, var. SCABRA (Dunal) Fern.; wooded hills and valleys; May through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 164).

HETEROTHECA

H. LATIFOLIA Buckl.; old fields and prairies; late June through October; 1 sheet. County: LeFlore.

HIERACIUM

H. GRONOVII L., var. GRONOVII; wooded valleys and hills; late May through October; 2 sheets. County: LeFlore.

H. LONGIPILUM Torr.; prairies and open woods; June and July. County: Latimer (Clark 2695).

HYMENOPAPPUS

H. SCABIOSAEUS L'Her., var. SCABIOSAEUS; wooded valleys and hills; May and June; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

KIGIA (Shinners 1947)

K. DANDELION (L.) Nutt.; open woods and prairies; May; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

K. OCCIDENTALIS Nutt.; prairies; May; 1 sheet. County:

Pushmataha.

K. OPPOSITIFOLIA Raf.; old fields and prairies; 3 sheets.

Counties: Latimer, LeFlore and Pushmataha.

K. VIRGINICA (L.) Willd.; wooded hills and valleys; 4 sheets.

Counties: Latimer and Pushmataha.

KHUNIA
(Shinners 1946)

K. EUPATORIODES L., var. OZARKANA Shinners; open woods; August through October; 1 sheet. Counties: Latimer, LeFlore (Waterfall 9844) and Pushmataha (Waterfall 8012).

LACTUCA

L. CANADENSIS L., var. CANADENSIS; prairies, waste places and open woods; June through August; 2 sheets. Counties: Latimer and LeFlore.

L. CANADENSIS L., var. LATIFOLIA (Michx.) Farw.; open woods of hills and valleys; June through August; 1 sheet. County: Latimer.

L. SCARIOLOA L., forma SCARIOLOA; prairies and waste places; June through August; 2 sheets. Counties: LeFlore and Pushmataha.

LIATRIS
(Gaiser 1946)

L. ASPERA Michx., var. ASPERA; prairies; August through October; 1 sheet. County: Pushmataha.

L. ASPER Michx., var. INTERMEDIA (Lunell) Gaiser; prairies and grassy forest clearings; mid July through September; 3 sheets.
Counties: LeFlore (Stevens 2714) and Pushmataha.

L. ELEGANS (Walt.) Willd.; prairies and open woods; August through October; 1 sheet. Counties: Latimer (Stratton 604), LeFlore (Carter 13) and Pushmataha.

L. MUCRONATA DC.; prairies; July through September; 2 sheets. Counties: LeFlore and Pushmataha.

L. PYCNOSTACHYA Michx.; prairies; late June through August; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

L. SCABRA (Greene) K. Schum.; prairies and open woods; July through October; 3 sheets. Counties: Latimer, LeFlore and Pushmataha. (Waterfall 10524).

L. SQUARROSA (L.) Michx., var. GLABRATA (Rydb.) Gaiser; open woods; July through October. County: Latimer (Wallis 7527).

L. SQUARROSA (L.) Michx., var. HIRSUTA; prairies and open woods; July through October; 2 sheets. Counties: Latimer, LeFlore (Stevens 2691) and Pushmataha.

MARSHALLIA

M. CAESPITOSA Nutt.; wooded hills and prairies; May; 5 sheets. Counties: Latimer, LeFlore and Pushmataha.

MIKANIA

M. SCANDENS (L.) Willd.; swampy sites and along streams; July through October. County: LeFlore (Stevens 2615).

PARTHENIUM

P. INTEGRIFOLIUM L.; prairies and open woods; May through July; 4 sheets. Counties: Latimer and LeFlore.

PLUCHEA

P. CAMPHORATA (L.) DC.; wooded hills and valleys; June through September; 4 sheets. Counties: Latimer, LeFlore and Pushmataha.

POLYMNIA

P. CANADENSIS L., forma *RADIATA* (Gray) Fassett; wooded hills and valleys; June through September. County: LeFlore (Stevens 2784).

P. UVEDALIA L., var. *DENSIPILIS* Blake; wooded valleys; July through September. County: Pushmataha (Waterfall 191).

PRENANTHES

P. ALTISSIMA L.; wet wooded valley sites; September and October. County: LeFlore (Waterfall 15235).

PYRRHOPAPPUS

P. SCAPOSUS DC.; old fields and open woods; June through October; 10 sheets. Counties: Latimer, LeFlore and Pushmataha.

RUDBECKIA
(Perude 1957)

R. GRANDIFLORA (Sweet) DC.; prairies; May through July; 7 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. HIRTA L., var. *PULCHERRIMA* Farwell; prairies and open woods; May and June; 6 sheets. Counties: Latimer, LeFlore and Pushmataha.

R. MAXIMA Nutt.; prairies; June; 1 sheet. County: Latimer.

R. SUBTOMENTOSA Pursh; open woods; August through October. Counties: Latimer (Clark sin. num.) and LeFlore (Stevens 2704).

R. TRILOBA L.; open woods of valleys; June through August; 2 sheets. Counties: Latimer, LeFlore and Pushmataha (Waterfall 137).

SENECIO

S. OBOVATUS Muhl., var. ROTUNDUS Britt.; wooded hills and valleys; late March and April; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. TOMENTOSUS Michx.; old fields and open woods; April; 2 sheets. County: Latimer.

SILPHIUM

S. ASTERISCUS L.; prairies and open woods; June and July; 2 sheets. Counties: LeFlore and Pushmataha (Waterfall 12379).

S. LACINIATUM Torr., var. ROBINSONII Perry; prairies; 3 sheets. Counties: Latimer and Pushmataha.

SOLIDAGO

S. CAESIA L.; wooded hills and valleys; August through October; 1 sheet. County: LeFlore.

S. CANADENSIS L., var. GILVOCANESCEENS Rydb.; old fields and wooded hills and valleys; August through October; 2 sheets. County: LeFlore.

S. CANADENSIS L., var. SCABRA (Muhl.) T. & G.; prairies and open woods; August through October; 1 sheet. Counties: Latimer (Cox 86) and LeFlore.

S. DELICATULA Small; prairies and open woods; August through October; 8 sheets. Counties: Latimer, LeFlore and Pushmataha.

S. GYMNOSPERMOIDES (Greene) Fern.; prairies and wooded valleys; August through October; 3 sheets. Counties: Latimer and Pushmataha.

S. HISPIDA Muhl.; wooded hills and valleys; September and October; 2 sheets. Counties: Latimer and LeFlore (Waterfall 15220).

S. MISSOURIENSIS Nutt., var. *FASCICULATA* Holz.; prairies; July through September; 1 sheet. County: Latimer.

S. NEMORALIS Ait.; prairies and open woods; September and October; 1 sheet. Counties: LeFlore (Waterfall 15196) and Pushmataha.

S. NITIDA T. & G.; prairies and open woods; August; 2 sheets. Counties: LeFlore and Pushmataha.

S. ODORA Ait.; wooded hills and valleys; September and October. Counties: LeFlore (Stevens 2661) and Pushmataha (Waterfall 9853).

S. PETIOLARIS Ait.; wooded hills and valleys; September and October. Counties: Latimer (Waterfall 10552), LeFlore (Waterfall 15205) and Pushmataha (Waterfall 10526).

S. RADULA Nutt.; prairies and open woods; September and October; 2 sheets. Counties: Latimer and LeFlore.

S. RUGOSA Ait.; var. *CELTIDIFOLIA* (Small) Fern.; prairies and open woods; September and October. Counties: Latimer (Waterfall 15174) and LeFlore (Hopkins 5602).

S. RUGOSA Ait., var. *ASPERA* (Ait.) Fern.; open woods of valleys; October; 1 sheet. County: LeFlore.

S. SPECIOSA Nutt., var. *ANGUSTATA* T. & G.; prairies and open woods; September and October; 1 sheet. County: Latimer.

SONCHUS

S. ASPER (L.) Hill, forma *GLANDULOSUS* Beckh.; prairies, old

fields and open woods; April through July; 1 sheet. Counties:
Latimer and Pushmataha (Waterfall 343).

TARAXACUM

T. ERYTHROSPERMUM Andrez.; old fields, hills and valleys; late
March through early June; 1 sheet. County: Latimer.

VERBESINA

V. ENCELIOIDES (Cav.) B. & H.; wooded valleys; late June through
October; 1 sheet. County: LeFlore.

V. HELIANTHOIDES Michx.; prairies and wooded valleys; August
through October; 5 sheets. Counties: LeFlore and Pushmataha.

V. VIRGINICA L.; wooded hills and valleys; August through
October; 2 sheets. Counties: LeFlore and Pushmataha (Waterfall 165).

VERNONIA

V. ALTISSIMA Raf.; wooded hills and valleys; August through
October; 1 sheet. Counties: Latimer and LeFlore (Waterfall 342).

V. BALDWINII Torr., var. BALDWINII; prairies, old fields and
valleys; August through October; 4 sheets. Counties: Latimer,
LeFlore and Pushmataha (Waterfall 150).

V. FASCICULATA Michx.; wooded valleys and along slews; August
through September; 1 sheet. County: Pushmataha.

V. LETTERMANNII Engelm.; wooded valleys and along stream beds;
July through October; 3 sheets. Counties: Latimer, LeFlore and
Pushmataha (Waterfall 10521).

V. MISSURICA Raf.; prairies and wooded hills and valleys; August

through October; 2 sheets. Counties: LeFlore and Pushmataha
(Waterfall 8524).

XANTHIUM

X. STRUMARIUM L.; old fields, disturbed sites and wooded valleys;
late August through September; 4 sheets. County: Latimer.

CHAPTER VII

TABULAR VIEW OF THE FAMILIES

The following is a tabulation of the taxa listed in Chapter VI:

Family	Genera	Species and Subspecific Taxa
Osmundaceae	1	1
Polypodiaceae	11	13
Pinaceae	3	4
Typhaceae	1	3
Sparganiaceae	1	1
Zosteraceae	1	2
Najadaceae	1	1
Alismataceae	3	6
Gramineae	52	149
Cyperaceae	6	59
Araceae	1	2
Lemnaceae	2	2
Xyridaceae	1	2
Commelinaceae	2	13
Juncaceae	2	15
Lilaceae	14	25
Amaryllidaceae	3	4
Dioscoreaceae	1	2
Iridaceae	2	3

Marantaceae	1	1
Orchidaceae	2	4
Saururaceae	1	1
Salicaceae	2	5
Juglandaceae	2	8
Betulaceae	4	4
Fagaceae	3	19
Ulmaceae	2	4
Moraceae	2	3
Utricaceae	4	4
Loranthaceae	1	1
Aristolachiaceae	1	1
Polygonaceae	5	20
Chenopodiaceae	2	5
Amaranthaceae	3	6
Nyctaginaceae	1	2
Phytolaccaceae	1	1
Aizoaceae	1	1
Portulacaceae	3	4
Coryophyllaceae	6	12
Nymphaceae	4	7
Ranunculaceae	7	16
Berberidaceae	1	1
Menispermaceae	2	2
Magnoliaceae	1	1
Anonaceae	1	1

Lauraceae	2	3
Papaveraceae	1	1
Fumariaceae	1	2
Cruciferae	11	14
Capparidaceae	2	2
Droseraceae	1	1
Crassulaceae	1	1
Saxifragaceae	6	6
Hamamelidaceae	2	2
Platanaceae	1	1
Rosaceae	10	32
Leguminosae	25	71
Geraniaceae	1	1
Oxalidaceae	1	5
Linaceae	1	2
Zygophyllaceae	1	1
Rutaceae	1	1
Meliaceae	1	1
Polygalaceae	1	5
Euphorbiaceae	9	26
Callitrichaceae	1	1
Anacardiaceae	1	5
Aquifoliaceae	1	2
Celastraceae	1	2
Staphyleaceae	1	1
Aceraceae	1	4
Hippocastanaceae	1	1

Sapindaceae	1	1
Balsaminaceae	1	1
Rhamnaceae	3	4
Vitaceae	4	11
Tiliaceae	1	3
Malvaceae	5	8
Guttiferae	2	9
Cistaceae	1	2
Violaceae	1	15
Passifloraceae	1	3
Cactaceae	1	2
Lythraceae	3	3
Melastomaceae	1	1
Onagraceae	4	15
Haloragaceae	2	4
Umbelliferae	17	21
Cornaceae	1	3
Nyssaceae	1	1
Ericaceae	3	6
Primulaceae	3	3
Sapotaceae	1	1
Ebenaceae	1	2
Styracaceae	1	1
Oleaceae	2	3
Loganiaceae	3	3
Gentianaceae	2	4
Apocynaceae	3	4

Asclepiadaceae	2	12
Convolvulaceae	3	12
Polemoniaceae	2	3
Hydrophyllaceae	3	5
Boraginaceae	5	5
Verbenaceae	2	7
Labiatae	18	28
Solanaceae	3	15
Scrophulariaceae	15	27
Bignoniaceae	2	2
Lentibulariaceae	1	1
Acanthaceae	3	6
Phrymaceae	1	1
Plantaginaceae	1	5
Rubiaceae	5	11
Caprifoliaceae	4	7
Valerianaceae	1	4
Cucurbitaceae	2	2
Campanulaceae	2	8
Compositae	<u>56</u>	<u>137</u>
Totals	457	1067

Out of a total of 119 families, the ten families with the largest number of species and subspecies are as follows:

Family	Genera	Species and Subspecific Taxa
Gramineae	52	149
Compositae	56	137
Leguminosae	25	71
Cyperaceae	6	59
Rosaceae	10	32
Labiatae	18	28
Scrophulariaceae	15	27
Euphorbiaceae	9	26
Umbelliferae	17	21
Polygonaceae	<u>5</u>	<u>20</u>
Totals	213	570

CHAPTER VIII

SUMMARY

After moving to eastern Oklahoma State College as Instructor in Botany and becoming aware of the variety in the local flora, the author began an extensive study of the northern Ouachita Highlands. The author has authenticated approximately 4,500 sheets which have been processed according to standard herbarium procedures. The first set has been placed in the Herbarium of Oklahoma State University with duplicates going to Eastern Oklahoma State College at Wilburton, Oklahoma.

Monographs, revisions and other taxonomic literature from the Oklahoma State University Library and the personal libraries of Dr. U. T. Waterfall and the author were used in the identification of the specimens.

The order of listing of the families follows that of the Engler-Prantl System. Each species is accompanied with general habitats and county or counties in which collected. Whenever a citation of a collection other than that of the author's was used, the collector's name and collection number is given.

A total of 1067 species and subspecific taxa representing 457 genera and 119 families were identified. The families having the greatest number of species and subordinate taxa were Gramineae 149, Compositae 137, Leguminosae 71, Cyperaceae 59, Rosaceae 32,

Labiatae 28, Scrophularaceae 27, Euphorbiaceae 26, Umbelliferae 21, and Polygonaceae 20. These 10 families contain 53% of the total species and subordinate taxa.

No taxa are reported as new records for the state although 17 species are listed as range extensions or of special interest due to their limited distribution.

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