# LIST OF INDIANA PLANTS, CHIEFLY FROM PUTNAM COUNTY, COLLECTED 1910-1915 BY EARL J. GRIMES.<sup>1</sup>

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Specimens of the plants listed in this paper are deposited with the Biology Department of DePauw University. The grasses were determined by Agnes Chase, most of the Carices by M. L. Fernald, and the Crataegi by W. W. Eggleston. Many of the other determinations were checked by C. C. Deam. All locations are in Putnam County except as indicated.

# I. PTERIDOPHYTA. Ferns and their allies.

## POLYPODIACEAE.

- Adiantum pedatum L. One mile east of Russellville, on rich wooded hillside, July 10, 1910.
- Aspidium marginale (L.) Sw. Raccoon Creek, four miles south of Russellville, on rocky hillside, Aug. 28, 1910.
- Aspidium noveborucense (L.) Sw. Raccoon Creek, one mile north of Ferndale, Parke Co., along a stream, Sept. 11, 1910.
- Asplenium acrostichoides Sw. Four miles south of Russellville, on rich wooded hillside, Aug. 28, 1920.
- Asplenium angustifolium Michx. Five miles south of Russellville, in deep rich woods, Sept. 4, 1910.
- Asplenium felix-femina (L.) Bernh. Five miles of Russellville, on rich wooded hillside, Sept. 4, 1910.
- Asplenium platyneuron (L.) Oakes. Near Russellville, on dry hillside, Sept. 1, 1910.
- Asplenium trichomanes L. Four miles south of Russellville, on dry sandstone ledge, July 10, 1910. Six miles south of Russellville, Sept. 4, 1910. South of Russellville on sandstone cliff, Oct. 5.
- Camptosorus rhizophyllus (L.) Link. Sugar Creek at the "Shades" on dry sandsone cliff, Montgomery Co., July 4, 1910.
- Cystopteris bulbifera (L.) Bernh. At the "Shades", Montgomery Co., July 4, 1910. Five miles south of Russellville on wooded hillside, July 31, 1910, and in crevasses of rocks, Sept. 4, 1910.
- Onoclea sensibilis L. One mile north of Ferndale along roadside, Parke Co., Sept. 11, 1910. Four miles south of Russellville in swamp, Sept. 3, 1910.
- Pellaea atropurpurea (L.) Link. At the "Shades" on dry sandstone ledge, Montgomery Co., Sept. 25, 1910.
- Phegopteris hexagonoptera (Mich.) Fée. Four miles south of Russell-ville on dry wooded hillside, Aug. 28, 1910, and Sept. 4, 1910.
- Polypodium vulgare L. Three miles south of Rustellville, on dry sandstone ledge with Tsuga, July 10, 1910.

<sup>&</sup>lt;sup>1</sup> Presented at 1922 meeting.

<sup>&</sup>quot;Proc. Ind. Acad. Sci., vol. 33, 1923 (1924)."

Polystichum acrostichoides (Mx.) Schott. Four miles south of Russellville on rich bank of Raccoon Creek, June 10, 1910.

Pteris aquilina L. "The Shades" on dry slope, Montgomery Co., July 4, 1910. Madison Township, along right of way of old Big Four R. R.

Woodsia obtusa (Spreng.) Torr. Portland Mills on shaded sandstone cliff, July 4, 1911. Five miles south of Russellville on sandstone ledge, Sept. 4, 1911.

## OSMUNDACEAE.

Osmunda claytoniana L. Raccoon Creek south of Russellville on shaded sandstone ledge with Tsuga, July 9, 1911.

Botrychium virginianum (L.) Sw. Four miles south of Russellville in rich woods, June 12, 1910.

## OPHIOGLOSSACEAE.

Ophioglossum vulgatum L. Three miles south of Russellville, on dry wooded hillside, June 11, 1911.

## MARSILEACEAE.

Marsilea quadrifolia L. In old mill pond south of Vandalia Station, April 30, 1911.

# EQUISTACEAE.

Equisetum hyemale L., var. affine (Engelm.) A. A. Eaton. "The Shades" at edge of thicket along Indian Creek, Montgomery Co., July 23, 1911. Madison Township near Fern, on right of way of old Big Four R. R., Aug. 8, 1911. Two miles north of Tipton along railroad, Tipton Co., June 9, 1912.

#### LYCOPODIACEAE.

Lycopodium lucidulum Mx. Four miles south of Russellville on moist sandstone ledge, Aug. 28, 1910.

Lycopodium lucidulum, var. porophilum (Lloyd & Underw.) Clute. On moist sandstone cliffs at Fern, Oct. 4, 1911.

#### SELAGINELLACEAE.

Selaginella apus (L.) Spring. "The Shades" on moist sandstone rock in deep ravine, Montgomery Co., Sept. 25, 1910. Moist sandstone cliff in ravine at Fern, Aug. 8, 1911.

## II. SPERMATOPHYTA. Seed Plants.

#### 1. Gymnospermae.

#### TAXACEAE.

Taxus canadensis Marsh. Limestone cliff at the "Shades", Montgomery Co., Sept. 25, 1910. On "Devil's Backbone" near Bainbridge, June 25.

# PINACEAE.

- Juniperus virginiana L. Woods pasture, Russellville, Oct. 2, 1910. Dry hillside at Portland Mills, July 4, 1911.
- Larix laricina (DuRoi) Koch. At side of old Lake Manitou, Starke-Marshall county line, Sept. 15, 1915.
- Tsuga canadensis (L.) Carr. Four miles south of Russellville, on limestone ledge, July 10, 1910.

## 2. Angiospermae.

## TYPHACEAE.

Typha angustifolia L. One mile north of Russellville in small pond, Montgomery Co., July 17, 1910.

## SPARGANIACEAE.

Sparganium eurycarpum Engelm. Four miles northwest of Noblesville in muck swamp, Hamilton Co., Aug. 18, 1912.

#### NAJADACEAE.

Potamogeton americanus C. & S. Three and a half miles south of Russellville, June 11, 1911. Two miles northeast of Bainbridge in Walnut Creek, June 25, 1911.

#### ALISMACEAE.

- Alisma subcordatum L. One mile east of Russellville on edge of pond, Sept. 1, 1910.
- Sagittaria latifolia Willd. Raccoon Creek about one mile east of Portland Mills, July 4, 1911.

# GRAMINEAE.

- Agropyron repens (L.) Beauv. Three miles east of Russellville along right of way of C. H. & D. R. R., June 18, 1911.
- Agrostis perennans (Walt.) Tuckerm. Five miles west of Greencastle on open sandstone ledge, Oct. 4, 1911.
- Alopecurus prutensis L. Cultivated ground, Lafayette, Tippecanoe Co., May 18, 1914.
- Andropogon furcatus Muhl. Washington Township one mile above mouth of Mill Creek, in dry sandy bottom, Aug. 9, 1911. Frequent in Miami silt loam along L. E. & W. R. R. west of Goldsmith, Tipton Co., July 14, 1912.
- Andropogon scoparius Mx. Three miles east of Russellville, Sept. 10, 1911.
- Andropogon virginicus L. Three miles east of Russellville, Sept. 10, 1911.
- Aristida tuberculosa Nutt. Madison Township near Fern along right of way of old Big Four R. R., Aug. 8, 1911.
- Bromus secalinus L. North of Tipton, right of way of L. E. & W. R. R., Tipton Co., June 9, 1912. Turkey Run, Parke Co., June 24, 1915. Bromus tectorum L. Two miles east of Russellville on track of C. H.

& D. R. R., June 18, 1911. North of Tipton, Tipton Co., June 9, 1912.

Cenchrus tribuloides L. One mile east of Russellville, Sept. 3, 1911.

Dactylis glomerata L. Four miles south of Russellville, May 30, 1911.

Danthonia spicata (L.) Beauv. Three and a half miles south of Russell-ville on dry open hillside, June 11, 1911.

Diarrhena diandra (Michx.) Wood. Five miles south of Russellville in rich wooded ravine, July 9, 1911.

Digitaria sanguinalis (L.) Scop. Cultivated ground, Russellville, Sept. 9, 1911.

Echinochloa crusgalli (L.) Beauv. One mile east of Russellville in a meadow, Sept. 3, 1911. Three miles north of Sheridan in wheat, Hamilton Co., Sept. 8, 1912.

Eleusine indica Gaertn. Cultivated ground, Russellville, Sept. 9, 1911.
Elymus canadensis L. Madison Township near Fern, old Big Four R. R. right of way, Aug, 8, 1911. Along railroad west of Goldsmith, Tipton Co., July 14, 1912.

Elymus striutus Willd. Three and a half miles south of Russellville, June 24, 1911.

Elymus virginicus L. Four miles south of Russellville, sandy alluvial soil along Raccoon Creek, June 6, 1911. One mile east of Portland Mills in sandy alluvial bottom, July 4, 1911. Two miles west of Goldsmith in dry silty loam, Tipton Co., July 14, 1912.

Eragrostis hypnoides (Lam.) BSP. One mile east of Russellville at edge of a pond, Sept. 13, 1911.

Eragrostis megastachya (Koeler) Link. Cultivated ground, Russellville, Sept., 1911.

Eragrostis pectinacea (Mx.) Steud. Madison Township near Fern, along old Big Four R. R., Aug. 8, 1911.

Eragostis pilosa (L.) Beauv. Monroe Township four miles south of Bainbridge, Aug. 14, 1911.

Festuca elatior L. Near Greencastle along old Big Four R. R., June 4, 1911. Three miles east of Russellville on damp bank, June 18, 1911.
Two miles west of Bainbridge along roadside, June 25, 1911. One mile east of Petersburg along Dixon's Creek, Tipton Co., June 10, 1912.

Festuca naturs Spreng. Near Kempton on right of way of L. E. & W. R. R., Tipton Co., Aug. 18, 1912.

Glyceria nervata (Willd.) Trin. One mile east of Russellville along small stream, June 18, 1911.

Hordcum jubatum L. Street in Russellville, June 6, 1911. Four miles north of Tipton along L. E. & W. R. R., Tipton Co., June 9, 1912.

Hystrix patula Moench. Rocky hillside along Walnut Creek, two miles northeast of Bainbridge, June 25, 1911.

Leersia oryzoides (L.) Sw. Four miles south of Russellville in swampy soil, Sept. 3, 1911.

Lolium multiflorum Lam. Near Russellville, Sept., 1915.

Melica nitens Nutt. Base of wooded slope along roadside at Happy Hollow, northwest of Lafayette, Tippecanoe Co., May 18, 1914.

- Muhlenbergia racemosa (Michx.) BSP. Shores of Mud Lake, Starke Co., Aug., 1915.
- Muhlenbergia schreberi J. F. Gmel. Three miles south of Russellville on bank of Raccoon Creek, Sept. 3, 1911. In Russellville, Sept., 1911.
- Muhlenbergia sobolifera (Muhl.) Trin. Cultivated ground, Russellville, Sept., 1911.
- Panicum capillare L. One mile east of Russellville on open hillside. Sept. 3, 1911.
- Panicum clandestinum L. Four miles south of Russellville, June 11, 1911.
  Panicum dichotomiflorum Michx. Cultivated ground, Russellville, Sept.,
  1911.
- Panicum huachucae Ashe. Three miles south of Russellville on dry open hillside, June 11, 1911.
- Panicum virgatum L. Four miles south of Russellville, Sept. 3, 1911.
  Along L. E. & W. R. R. east of Kempton, Tipton Co., July 14, 1912.
- Paspalum stramineum Nash. Madison Township near Fern, Oct. 4, 1911.
  Four miles east of Russellville, on dry hillside, Sept. 10, 1911. Three miles northeast of Knox in sandhill along C. I. & S. R. R., Starke Co., Aug. 20, 1915.
- Phalaris arundinacea L. Along a stream in Russellville, June 24, 1911.Phleum pratense L. Floating bog at Mud Lake, Starke Co., Sept. 17, 1915.
- Phragmites communis Trin. Floating bog at Mud Lake, Starke Co., Sept. 17, 1915.
- Poa compressa L. Two miles east of Russellville, June 18, 1911. Four miles north of Tipton along L. E. & W. R. R., June 9, 1912.
- Poa prateusis L. One mile east of Russellville, on edge of woods, May 5, 1912.
- Poa sylvestris Gray. Five miles south of Russellville on wooded hillside, May 28, 1911.
- Setaria glauca (L.) Beauv. Russellville, Sept. 3, 1910.
- Setaria viridis (L.) Beauv. Three miles south of Russellville, in dry sandy soil, Sept. 3, 1911.
- Spartina michauxiana Hitchc. East of Strawtown in flood plain of White River along a bluff, Hamilton Co., Aug. 31, 1912.
- Sphenopholis pallens (Spreng.) Scribn. Five miles south of Russellville on rocky hillside, May 28, 1911. Two miles east of Tipton in low swampy grounds and three miles south of Tipton on edge of low woods, Tipton Co., June, 1912.
- Sporobolus asper (Mx.) Kunth. Three miles east of Russellville along railroad, Sept. 10, 1911.
- Sporobolus vaginiflorus (Torr.) Wood. Three miles west of Noblesville in clover field, Hampton Co., Sept. 8, 1912. Near Russellville, Aug. 6, 1915.
- Stipa spartea Trin. Near Russellville, Aug., 1915.
- Tridens flavus (L.) Hitchc. Three miles south of Russellville, in dry sandy soil, July 30, 1911.

## CYPERACEAE.

- Carex cephalophora Muhl. Four miles south of Russellville in a swamp, June 11, 1911.
- Carex eristata Schwein. Four miles south of Russellville in a swamp, June 11, 1911.
- Carex davisii Schwein. & Torr. Three miles north of Tipton on edge of woods, low ground, Tipton Co., June 9, 1912.
- Carex formosa Dewey. Three miles south of Russellville on dry hillside, June 11, 1911.
- Carex frankii Kunth. Four miles east of Russellville in low damp ground along railroad, Sept. 24, 1911.
- Carex granularis Muhl. One mile east of Russellville in low wet ground, June 18, 1911.
- Carex grayii Carey. One mile east of Russellville in low ground on edge of woods, June 18, 1911.
- Carex laxiflora, var. latifolia Boott. Five miles south of Russellville in rich woods, May 28, 1911. Three miles north of Tipton in dense white oak woods swamp, Tipton Co., June 9, 1912.
- Carex laxiflora, var. varians Bailey. Five miles south of Russellville in rich deep woods, May 28, 1911.
- Carex lupulina Muhl. One mile east of Russellville in low wet ground, June 18, 1911. Four miles south of Russellville, Sept. 24, 1911.
- Carex hurida, var. gracilis (Boott) Bailey. Three and a half miles south of Russellville along a small stream, June 11, 1911.
- Carex mirabilis Dewey. Along Raccoon Creek five miles south of Russell-ville, May 28, 1911.
- Carex plantaginea Lam. Five miles south of Russellville in rich ravine, April 16, 1911.
- Carex rosea Schkuhr. Five miles south of Russellville on dry rocky hillside, May 28, 1911. Three miles north of Tipton in low ground on edge of woods, June 9, 1911.
- Carex shortiana Dewey. One mile east of Russellville in low damp ground, June 18, 1911.
- Carex squarrosa L. One mile east of Russellville, in low wet ground, June 18, 1911.
- Carex stipata Muhl. Four miles south of Russellville in a swamp, June
   11, 1911. East of Tipton in low ground along traction lines, Tipton
   Co., June 9, 1912.
- Carex vireseens Muhl. Rocky sandstone hillside at Fern, Aug. 8, 1911. Carex vulpinoidea Michx. Three and a half miles south of Russellville in ravine along stream, June 11, 1911.
- Cyperus aristatus Torr. & Hook. Washington Township one mile above mouth of Mill Creek along moist sandy shore, Aug. 9, 1911.
- Cyperus diandrus Torr. Near Fern in ditch along Big Four R. R., Oct. 4, 1911.
- Cyperus esculentus L. Three miles north of Noblesville on margin of swamp, Hamilton Co., Sept. 8, 1912.
- Cyperus strigosus L. Three and a half miles south of Russellville on border of a swamp, July 30, 1911. Four miles east of Russellville

in low wet ground, Sept. 24, 1911. Three miles north of Noblesville on border of swamp, muck and peat soils, Hamilton Co., Sept. 8, 1912.

Eleocharis acicularis (L.) R. & S. One mile east of Raccoon along C. H. & D. R. R. in low damp soil, Sept. 17, 1911.

Eleocharis obtusa (Willd.) Schultes. Half a mile east of Russellville on margin of pond, Sept. 17, 1911.

Eleocharis palustris, var. glaucescens (Willd.) Gray. One mile east of Russellville in ditch along railroad, May 21, 1911.

Eriophorum virginicum, var. album Gray. Three miles north of Noblesville in muck and peat soil, Hamilton Co., Sept. 8, 1912.

Kyllinga pumila Mx. North of Sheridan in swampy wood, Hamilton Co., Aug., 1912.

Scirpus cyperinus (L.) Kunth. Near Fern along old Big Four R. R. in a ditch, Oct. 4, 1911.

Scirpus lineatus Mx. Along railroad east of Russellville, May 21, 1911.

Three miles south of Russellville along a stream, June 11, 1911.

Scirpus polyphyllus Vahl. Near Fern in deep moist ravine, Oct. 4, 1911. Scirpus validus Vahl. Four miles east of Russellville in a swamp, June 11, 1911.

#### ARACEAE.

Acorus calamus L. Four miles south of Russellville in low wet ground, May 21, 1911.

Arisaema dracontium (L.) Schott. Three miles south of Russellville on rich wooded hillside, May 22, 1910.

Arisaema triphyllum (L.) Schott. Near Russellville, May, 1910.

Symplocarpus foetidus (L.) Nutt. Three miles south of Russellville in a swamp, April 9, 1911.

#### LEMNACEAE.

Spirodela polyrhiza (L.) Schleid. Two miles southeast of Cloverdale along Mill Creek, Aug. 13, 1911. Near Limedale in abandoned rock quarry, Oct. 5, 1911.

#### COMMELINACEAE.

Tradescantia brevicaulis Raf. Dry hillside along Monon railway south of Lafayette, Tippecanoe Co., May 11, 1915.

Tradescantia pilosa Lehm. Four miles south of Russellville on rich wooded hillside, July 10, 1910.

Tradescantia reflexa Raf. Four miles south of Bainbridge on gravel embankment of Monon R. R., Aug. 14, 1911.

# JUNCACEAE.

Juncus effusus, var. solutus Fernald & Wiegand. Near Limedale in an abandoned rock quarry, Oct. 4, 1911.

Juncus tenuis Willd. South of Russellville, in dry pasture, June 11, 1911. Five miles west of Greencastle in low ground, Oct. 4, 1911. Two miles east of Tipton, low ground along L. E. & W. R. R., Tipton Co., June 9, 1912.

Juncus torreyi Coville. Railway east of Russellville, June 18, 1911.
 Luzula campestris (L.) D. C., var. bulbosa Wood. Five miles south of Russellville on dry rocky hillside, May 28, 1911.

# LILIACEAE.

Allium cernuum Roth. Turkey Run, three miles south of Marshall, dry rocky hillside, July 2, 1911.

Allium tricoccum Ait. Three miles south of Russellville on rich wooded hillside, July 31, 1911.

Asparagus officinalis L. Pasture near Russellville, June 18, 1911.

Camassia esculenta (Ker.) Robinson. Four miles east of Russellville on rich wooded slope, May 1, 1910.

Erythronium albidum Nutt. Near mouth of Ramp Creek south of Russellville, on rich wood hillside, April 9, 1911.

Erythronium americanum Ker. Raccoon Creek four miles south of Russellville on wooded hillside with Trillium, April 16, 1911.

Lilium canadense L. Near Russellville, May 10, 1910.

Lilium superbum L. Three quarters of a mile east of Russellville on right of way of C. H. & D. R. R., July 17, 1910.

Maianthemum canadense Desf. Two miles northeast of Bainbridge along Walnut Creek on dry hillside, June 25, 1911.

Medeola virginica L. Five miles south of Russellville in rich soil on rocky hillside, May 29, 1910.

Polygonatum biflorum (Walt.) Ell. Three miles south of Russellville on rocky wooded hillside, May 8, 1910.

Polygonatum commutatum (R. & S.) Dietr. Four miles east of Russell-ville on open dry hillside, May 22, 1911.

Smilacina racemosa (L.) Desf. Two miles east of Russellville in shady ravine, May 1, 1911. Four miles south of Russellville in a deep ravine, May 18, 1911.

Smilacina stellata (L.) Desf. Three miles south of Russellville in a swamp, May 7, 1911.

Smilax hispida Muhl. Three and a half miles south of Russellville in a swamp and in flood plain thicket of Raccoon Creek south of Russellville, July, 1911. Four miles east along a stream, Sept. 24, 1911.

Smilax lasioneuron Hook. Northeast of Russellville in a fence-row, June 12, 1911.

Trillium cernuum L. Near Russellville on rocky hillside, April, 1910.

Trillium declinatum (Gray) Gleason. South of Russellville in rich wooded ravines, April and May, 1911.

Trillium grandiflorum (Mx.) Salisb. Three miles south of Russellville on wooded slope along Raccoon Creek, April 30, 1911.

Trillium nivale Riddell. Three miles east of Russellville on moist slope, common, May 1, 1910, March 12, 1911.

Trillium recurvatum Beck. East of Russellville in rich moist woods, April 24, 1910. Four miles south in wooded ravine, May 5, 1911.

Trillium sessile L. East of Russellville in rich woods, April, 1910, and 1911. Five miles south on wooded bank near mouth of Ramp Creek, April 9, 1910.

- Uvularia grandiflora Sm. South of Russellville on wooded hillside, along Raccoon Creek, April 30, 1911.
- Veratrum woodii Robbins. Four miles south of Russellville on rich wooded hillside, Oct. 9, 1910.

#### DIOSCOREACEAE.

Dioscorea villosa L. Four miles south of Russellville, rich wooded hillside, June 11, 1911.

#### AMARYLLIDACEAE.

Hypoxis hirsuta (L.) Coville. North of West Lafayette on dry wooded hillside, Tippecanoe Co., May 18, 1914.

#### IRIDACEAE.

- Belamacanda chincusis (L.) DC. Moist hillside along Sugar Creek near Crawfordsville, Montgomery Co., Aug. 9, 1910. Five miles south of Russellville in dry roadside, Oct. 15, 1911.
- Iris versicolor L. Three miles south of Russellville in dry sandy field, June 12, 1910.
- Sisyrinchium gramineum Curtis. Raccoon Creek four miles south of Russellville, May 22, 1910.
- Sisyrinchium mucronatum Mx. Near Lafayette one mile south of Battle Ground along Monon Railway, Tippecanoe Co., May 22, 1914.

# ORCHIDACEAE.

- Cypripedium parviflorum Salisb. Five miles south of Russellville on wooded hillside, May 28, 1911.
- Epipactis pubescens (Willd.) A. A. Eaton. One mile north of Ferndale on rocky hillside, Parke Co., Sept. 11, 1910.
- Habenaria bracteata (Willd.) R. Br. Rich wooded slope at Happy Hollow north of West Lafayette, Tippecanoe Co., June 5, 1914.
- Habenaria ciliaris (L.) R. Br. Two miles south of Hamlet in moist sandy soil, Starke Co., July 26, 1915. Five miles east of Knox in undrained sandy flat, Aug. 27, 1915.
- Liparis liliifolia (L.) Richard. Five miles south of Russellville in rich dry woods, Sept. 4, 1910. Deep woods along Raccoon Creek, May 20, 1911.
- Orchis spectabilis L. Along Raccoon Creek four miles south of Russell-ville, May 8, 1910.
- Pogonia trianthophora (Sw.) BSP. One mile north of Ferndale, rich deep woods, Parke Co., Sept. 11, 1910. Two miles southeast of Carpentersville along Big Walnut Creek in rich level woods, Aug. 17, 1911. One mile north of Cataract along Mill Creek, Owen Co., Aug. 12, 1911.
- Spiranthes cernua (L.) Richard. North shore of Bass Lake in fine wet sand among rushes, Starke Co., Sept. 17, 1915. High wooded hill south of Russellville, July, 1915.
- Spiranthes gracilis (Bigel.) Beck. Three and a half miles south of Russellville in high dry woods, Sept. 18, 1910.

## PIPERACEAE.

Saururus cernuus L. Washington Township along shore of Mill Creek one mile above its mouth, Aug. 10, 1911.

#### SALICACEAE.

- Populus alba L. Four miles south of Bainbridge, Aug. 14, 1911.
- Populus candicans Ait. Four miles south of Russellville on open hill-side. Introduced. Sept. 3, 1911.
- Populus grandidentata Mx. Three miles south of Russellville on dry hillside, July 31, 1910. Near Raccoon on C. H. & D. R. R., Sept., 1911.
- Populus deltoides Marsh. Four miles east of Russellville on dry railway bank, May 21, 1911.
- Populus tremuloides Mx. Poor dry hillside north of Fern cliffs, Oct. 4, 1911.
- Salix alba L. Four miles south of Russellville along Raccoon Creek, 1911.
  Salix cordata Muhl. Four miles south of Russellville along bank of Raccoon Creek and east of Russellville, 1911.
- Salix discolor Muhl. Four miles south of Russellville in a swamp, 1911. Four miles east of Russellville, Oct., 1911. Five miles west of Greencastle in ditch along old Big Four R. R., 1911.
- Salix humilis Marsh. Poor dry hillside north of Fern cliffs, Oct., 1911. Salix longifolia Muhl. Near Russellville in ditch along roadside, Sept. 20, 1911.
- Salix nigra Marsh. Near Russellville on edge of pond, 1911. East of Tipton on edge of pond, Tipton Co., June 9, 1912.

# MYRICACEAE.

Myrica asplenifolia L. South shore of Bass Lake, in sandy woods, Starke Co., 1915.

# JUGLANDACEAE.

- Carya alba (L.) K. Koch. One mile southeast of Kempton on Miami silt knoll with Quercus alba and Q. imbricaria, Tipton Co., July 16, 1912.
- Carya cordiformis (Wang.) K. Koch. Four miles south of Russellville in wooded ravine, Sept. 17, 1911.
- Carya glabra (Mill.) Spach. Three miles south of Russellville, wooded hill along Raccoon Creek, Sept. 17, 1911. Open hillside near Fern, Oct. 4, 1911.
- Carya laciniosa (Mx. f.) Loud. Four miles south of Russellville on poor hillside, Sept., 1911. One mile north in rich woods, Montgomery Co., 1911.
- Carya microcarpa Nutt. Three miles south of Russellville, dry hillside, Sept. 17, 1911.
- Carya ovata (Mill.) K. Koch. Three miles south of Russellville, dry hillside, Sept. 17, 1911.
- Juglans cinerea L. Four miles south of Russellville on limestone cliffs, May 30, 1911.
- Juglans nigra L. Near Russellville, 1911.

#### BETULACEAE.

Betula pumila L. Seven miles east of Knox, Starke Co., Aug. 25, 1915. Carpinus caroliniana Walt. Three miles south of Russellville along a stream, Apr. 30, 1911.

Corylus americana Walt. Four miles south of Russellville, July 31, 1910. Ostrya virginiana (Mill.) K. Koch. Near Russellville, 1911.

#### FAGACEAE.

Fagus grandifolia Ehrh. Three miles south of Russellville on dry hillside, April 30, 1911.

Quercus alba L. South and east of Russellville in poor soil, 1911.

Quercus bicolor Willd. East of Russellville, Sept. 17, 1911.

Quercus muhlenbergii Englem. South of Russellville on dry hilltop, Sept. 3, 1911. Six miles northwest of Noblesville along Lafayette road on gravelly slope, Hamilton Co., 1912.

Quercus palustris Muench. Near Fern on open hillside, Oct. 4, 1911. East of Russellville in low woods.

Quercus rubra L. Four miles east of Russellville on crest of dry ravine
 Sept., 1911. Near Fern in thin soil on open hilltop, Oct. 4, 1911.
 Quercus velutina Lam. Near Fern, poor soil of open hilltop, Oct., 1911.

## URTICACEAE.

Boehmeria cylindrica (L.) Sw. Three miles south of Russellville in a swamp, Aug. 28, 1910.

Cannabis sativa L. Near Portland Mills along roadside, Sept. 11, 1910. Celtis occidentalis L. Three miles south of Russellville along Raccoon Creek, May 7, 1911.

Humulis lupulus L. South of Russellville on border of deep woods, Aug. 18, 1910.

Laportea canadensis (L.) Gaud. One mile east of Russellville in rich woods, Sept. 1, 1910.

Maclura pomifera (Raf.) Schneider. Along Raccoon Creek south of Russellville, June 19, 1910.

Morus alba L. Five miles south of Russellville along roadside, 1910. Morus rubra L. Near Russellville in a field, June, 1910.

Parietaria pennsylvanica Muhl. Three miles east of Russellville on rich shaded hillside with Pilea pumila, Sept. 24, 1911.

Pilea pumila (L.) Gray. One mile east of Russellville in wet soil, Sept. 1, 1910.

Ulmus americana L. Three miles east of Russellville near Raccoon Creek, March 12, 1911.

Ulmus fulva Mx. South and east of Russellville in wooded ravines, 1911. Ulmus racemosa Thomas. Three miles south of Russellville on a limestone ledge, Apr. 23, 1911.

#### SANTALACEAE.

Comandra umbellata (L.) Nutt. High hilltop at Happy Hollow northwest of Lafayette, Tippecanoe Co., May 18, 1914.

## ARISTOLOCHIACEAE.

- Aristolochia serpentaria L. Four miles east of Russellville in rich woods, July 24, 1910.
- Asarum canadense L. North and south of Russellville in rich woods, Apr., 1910 and 1911.
- Asarum canadense, var. acuminatum Ashe. Three miles south of Russellville on rich wooded hillside, May 7, 1911.

# POLYGONACEAE.

- Fagopyron esculentum Moench. Two miles west of Crawfordsville along Big Four R. R., Aug. 10, 1910. Weed in cultivated ground west of Russellville, July, 1912.
- Polygonum acre HBK. Near Russellville in open woods, Sept., 1910 and 1911.
- Polygonum arifolium L. One mile north of Ferndale in damp woods in ravine, Sept. 11, 1910. Near Fern in deep ravine, Aug. 8, 1911.
- Polygonum aviculare L. On track of Monon railroad north of Greencastle, Aug. 27, 1911.
- Polygonum convolvulus L. East of Russellville along railroad, July, 1911. Polygonum hydropiperoides Mx. One mile north of Strawtown on bottoms of Duck Creek, Hamilton Co., Sept. 8, 1912.
- Polygonum lapthifolium L. South of Russellville in low damp soil, Aug. and Sept., 1910.
- Polygonum muhlenbergii (Meisn.) Wats. Washington Township in swampy bottom near mouth of Mill Creek, Aug. 9, 1911. West of Goldsmith in low ground on Carrington clay loam, Tipton Co., July 14, 1912.
- Polygonum orientale L. Crawfordsville, waste ground, Montgomery Co., Aug. 9, 1910. Four miles south of Bainbridge in low ground, Aug. 14, 1910.
- Polygonum pennsylvanicum L. Near Russellville on bank of a stream, Sept., 1910. East of Raccoon in damp ground, Sept., 1911.
- Polygonum persicaria L. Three miles east of Russellville, low ground, Sept. 24, 1911.
- Polygonum sagittatum L. East of Russellville in wet beech woods, Sept. 1, 1910.
- Polygonum scandens L. Three miles south of Russellville in damp ground, Aug. 21, 1910.
- Polygonum tenue Mx. Dry open hillside north of Fern, Aug. 8, 1911.
  Three miles northeast of Knox, sandy hill along C. I. & S. R. R., Aug. 20, 1915.
- Polygonum virginianum L. Three miles south of Russellville on border of rich woods, Aug. 21, 1910.
- Rumex acctosella L. In Russellville cemetery, Aug. 1, 1910. Three miles south, May 19, 1912.
- Rumex altissimus Wood. West of Greencastle at crossing of Monon and old Big Four Railroads, on ballasted cinder bank, June 4, 1911.
- Rumex crispus L. Near Russellville, Oct. 5, 1911.
- Rumex obtusifolius L. Near Russellville along a stream, July 10, 1910.

#### CHENOPODIACEAE.

- Chenopodium album L. Weed in Russellville, Oct. 2, 1910. Near Fincastle along roadside and along Monon R. R., near Roachdale, 1911.
- Chenopodium album, var. viride (L.) Moq. Weed in Russellville, Sept. 3, 1911.
- Chenopodium ambrosioides L. Street in Russellville, Oct. 2, 1910. Five miles north of Sheridan in low wet woods, Hamilton Co., Aug. 14, 1912.
- Chenopodium botrys L. Near Crawfordsville in dry sandy soil, Montgomery Co., Aug. 10, 1910.
- Chenopodium glaucum L. In Kempton on dry ballast of railroad, Tipton Co., July 14, 1912.
- Chenopodium hybridum L. Weed in Russellville, Aug. 16, 1911.
- Chenopodium murale L. Three miles north of Waveland along roadside, Montgomery Co., July 23, 1911.
- Cycloloma atriplicifolium (Spreng.) Coult. At Fern stop on track of Big Four R. R., Oct. 4, 1911.
- Salsola kali, var. tenuifolia G. F. Mey. Four miles south of Bainbridge on track of Monon R. R., Aug. 14, 1911.

# AMARANTHACEAE.

- Acuida tuberculata Moq. Three miles north of Noblesville on border of bog, Hamilton Co., Sept. 8, 1912.
- Amaranthus blitoides Wats. Along railroad east of Russellville, Sept. 3, 1911.
- Amaranthus graecizans L. One mile east of Russellville along railroad, Sept. 18, 1910.
- Amaranthus hybridus L. Cloverdale Township along old bed of Mill Creek, Aug. 13, 1911.
- Amaranthus retroflexus L. Weed in Russellville, Sept., 1911. Near Raccoon along creek, Oct. 5, 1911. Waste ground in Greencastle. Amaranthus spinosus L. In Russellville, Sept., 1910.

# PHYTOLACACEAE.

Phytolacca decandra L. North of Russellville in rich fence row, Montgomery Co., July 17, 1910. East of Russellville along railroad July 30, 1911.

#### NYCTAGINACEAE.

Oxybaphus nyctagineus (Mx.) Sweet. Three miles west of Greencastle on bank of old Big Four R. R., June 4, 1911. East of Portland Mills in sandy alluvial bottom, July 4, 1911.

# ILLECEBRACEAE.

Anychia canadensis (L.) BSP. Three miles east of Russellville, July, 1910.

#### AIZOACEAE.

Mollugo verticillata L. Weed in Russellville, July 25, 1910.

#### CARYOPHYLLACEAE.

- Arenaria patula Mx. Two miles south of Lafayette on dry slope along old canal, May 11, 1914.
- Arenaria serpyllifolia L. In a woodlot west of Fafayette, Tippecanoe Co., July 3, 1914. Turkey Run on dry sterile hillside, Parke Co., June 24, 1915.
- Cerastium arrense L. Dry hillside one mile north of Russellville, Montgomery Co., July 17, 1910.
- Cerastium nutuus Raf. Five miles south of Russellville, dry open hill-side, May 28, 1911.
- Saponaria officinalis L. One mile east of Russellville in sandy soil, July 10, 1910.
- Silene antirrhina L. Two miles northeast of Bainbridge in sandy bottom field, June 25, 1911.
- Silene noctiflora L. Along right of way of Monon R. R. near Crawfordsville, Montgomery Co., June 15, 1910.
- Silene stellata (L.) Ait. f. Four miles east of Russellville on dry wooded hillside, July 24, 1910.
- Silene virginica L. Three miles east of Russellville, wooded hillside, May 1, 1910.
- Stellaria longifolia Muhl. Three miles south of Russellville in a swamp, June 11, 1911.
- Stellaria pubera Mx. East of Russellville in open woods, April, 1910. Four miles south on a sandstone cliff, May 7, 1911.

#### PORTULACACEAE.

Claytonia virginica L. Five miles south of Russellville in damp shady soil along Raccoon Creek, April 30, 1911. Near Russellville, May, 1909.

#### NYMPHACACEAE.

- Castalia odorata (Ait.) Woodville & Wood. In Greencastle in water of an old quarry, Aug. 27, 1911.
- Nymphaea advena Ait. In a pond south of Russellville, July 3, 1911.

# RANUNCULACEAE.

- Actaea alba (L.) Mill. East of Russellville on rich wooded hill, May 22, 1910. Six miles south in rich ravine, May 18, 1911.
- Anemone canadensis L. South of Russellville along Raccoon Creek, June 12, 1910.
- Anemone virginiana L. Four miles south of Russellville in thicket at Raccoon Creek, April, 1910.
- Anemonella thalictroides (L.) Spach. Five miles south of Russellville, rich shaded ravine in woods, April, 1910. Near mouth of Ramp Creek, April 9, 1911.
- Aquilegia canadensis L. Three miles south of Russellville on sandstone bluff, April 17, 1910.
- Caltha palustris L. Raccoon Creek south of Russellville, April 16, 1911.

- Clematis viorna L. Six miles south of Russellville in deep ravine, Oct. 16, 1910.
- Clematis virginiana L. Three miles west of Crawfordsville along roadside, Montgomery Co., Aug. 10, 1910.
- Delphinium tricorne Mx. Four miles east of Russellville in rich moist soil of deep ravine, May 1, 1910.
- Hydrastis canadensis L. Five miles south of Russellville, in rich low ground in dense woods, July 29, 1910. One mile north of Russellville in deep rich woods.
- Isopyron biternatum (Raf.) T. & G. Four miles south of Russellville in deep ravine, April 30, 1911. Near Russellville in woodland pasture, May 15, 1909.
- Ranunculus abortivus L. One mile east of Russellville in woods, April 20, 1910.
- Ranunculus acris L. Near Crawfordsville along old Big Four R. R., Montgomery Co., June 4, 1911. South shore of Bass Lake, Starke Co., Aug. 21, 1915. Russellville, June, 1911.
- Rununculus circinatus Sibth. Along Raccoon Creek four miles south of Russellville, May 21, 1911. East of Tipton in ditch, Tipton Co., June 9, 1912.
- Ranunculus hispidus Mx. North of Russellville in low damp woods, April 24, 1910.
- Ranunculus micranthus Nutt. North of Russellville in rich woods, May 30, 1911.
- Ranunculus recurvatus Poir. Five miles south of Russellville, in rich sheltered ravine, April 17, 1910.
- Ranunculus septentrionalis Poir. Three miles south of Russellville in damp ground near Raccoon Creek, April 30, 1911.
- Thalictrum dasycarpum Fisch. & Lall. Four miles south of Russell-ville in moist soil, June 19, 1910.
- Thalictrum dioicum L. Five miles south of Russellville on shaded hillsides near Raccoon Creek, April, 1910.

#### MAGNOLIACEAE.

Liriodendron tulipifera L. Three miles south of Russellville, on dry open hillsides, May and June, 1911.

#### ANONACEAE.

Asimina triloba Dunal. Near Russellville in open woods pasture, June 5, 1910. Three miles south in deep ravine, Sept. 17, 1911.

#### MENISPERMACEAE.

- Menispermum canadense L. North of Ferndale in rich soil, Parke Co., Sept. 11, 1910. Three miles south of Russellville in fence row, Oct., 1911.
- Berberis vulgaris R. Br. Four miles south of Russellville along small stream in deep rayine, May 22, 1910.

#### BERBERIDACEAE.

Caulophyllum thalictroides (L.) Mx. Four miles south of Russellville in rich woods, May 7, 1911.

Podophyllum peltatum L. East of Russellville, in rich moist woods, April 24, 1910.

# LAURACEAE.

Beuzoin aestivale (L.) Nees. East of Russellville in low beech woods, Sept. 11, 1910.

Sassifras variifolium (Salisb.) Ktze. South of Russellville in poor soil, Aug. 31, 1911.

# PAPAVERACEAE.

Sanguinaria canadensis L. South of Russellville on rich wooded hill-sides, April, 1911.

Stylophorum diphyllum (Mx.) Nutt. South of Russellville, April, 1910, May, 1911.

# FUMARIACEAE.

Corydalis sempervirens (L.) Pers. One mile southwest of Round Lake in fence-row in woods, on Dunkirk sand, Starke Co., Aug. 27, 1915.

Dicentra canadensis (Goldie) Walp. Five miles south of Russellville, in deep ravine in woods, April 17, 1910.

Dicentra cucullaria (L.) Bernh. Six miles south of Russellville on limestone cliffs, May 7, 1911. Three miles south, April 20, 1911.

## CRUCIFERAE.

Alyssum alyssoides L. West Lafayette, Tippecanoe Co., May 18, 1912. Arabis dentata T. & G. South of Russellville along Raccoon Creek, sandy soil in thicket, May 22, 1910.

Arabis laevigata (Muhl.) Poir. Five miles south of Russellville on rocky hillside, May 11, 1910. West Lafayette in fill along road,

Tippecanoe Co., May 18, 1912.

Brassica arrensis (L.) Ktze. Near Greencastle along old Big Four R. R., June 4, 1911. Three miles east of Russellville on railroad, June 18, 1911.

Brassica nigra L. Two miles south of Russellville along roadside, July 30, 1911.

Camelina microcarpa Andrz. Along right of way of Monon R. R. near

Crawfordsville, June 15, 1910.

Camelina sativa (L.) Crantz. In Purdue Orchard, Lafayette, Tippe-

canoe Co., May 17, 1914.

Cardamine bulbosa (Schreb.) BSP. East of Russellville, boggy soil in thick woods, April 24, 1910. Three miles south in a swamp, May 7, 1911.

Cardomine douglassii (Torr.) Britton. East of Russellville, damp soil in open woods, April 20, 1910. Five miles south beside a spring, April 9, 1911.

Cardamine pennsylvanica Muhl. Five miles south of Russellville in damp ravine, May 29, 1910. In fruit, Aug. 15, 1911. Two miles east of Bainbridge, beside cool spring, in deep woods.

- Conringia orientalis (L.) Dumort. Just north of Roachdale along ballasted bank of Monon R. R., Montgomery Co., May 6, 1911. Near Greencastle station on bank of Monon R. R., June 4, 1911.
- Dentaria laciniata Muhl. South and east of Russellville in rich moist shaded soil, April, 1911.
- Diplotaxis tenuifolia (L.) DC. Two miles north of Roachdale along Monon R. R., Montgomery Co., May 6, 1911.
- Erysimum cheiranthoides L. Three miles north of Tipton in wheat, Tipton Co., June 9, 1912. Scarce but noted elsewhere in county.
- Erysimum parviflorum Nutt. Near Greencastle on track of Monon R. R., June 4, 1911.
- Hesperis matronalis L. Two miles north of Crawfordsville along roadside, Montgomery Co., Aug. 9, 1910.
- Iodanthus pinnatifidus (Mx.) Steud. Five miles south of Russellville in sandy soil along Raccoon Creek, June 5, 1910.
- Lepidium campestre (L.) R. Br. One mile north of Tipton along railroad, Tipton Co., June 9, 1912.
- Radicula nasturtium-aquaticum (L.) Brit. Near Greencastle along Monon R. R., low wet ground, June 4, 1911.
- Radicula palustris (L.) Moench. Four miles east of Russellville near a stream, June 19, 1910. Near Greencastle along Monon R. R., June 4, 1911. Near Tipton in wet grounds, Tipton Co., July, 1912.
- Radicula palustris, var. hispida (Desv.) Rob. Near Goldsmith in ditch along L. E. & W. R. R., Tipton Co., July 14, 1912.
- Raphanus sativus L. On track of Monon R. R., south of Roachdale, Oct. 5, 1911.
- Sisymbrium altissimum L. Along Monon R. R. near Crawfordsville, Montgomery Co., June 15, 1910; and near Greencastle station, June 4, 1911. Four miles north of Tipton along L. E. & W. R. R., Tipton Co., June 9, 1912.
- Sisymbrium canescens Nutt. Along Monon R. R. south of Roachdale, May, 1911.
- Sisymbrium incisum Engelm. Along right of way of Monon R. R. south of Lafayette, Tippecanoe Co., May 11, 1915.
- Thalaspi arvense L. Along ballasted banks of Monon R. R. north of Roachdale, Montgomery Co., May 6, 1911; and south of Lafayette, Tippecanoe Co., May 22, 1915.

#### CAPPARIDACEAE.

Polanisia graveolens Raf. Four miles east of Russellville on gravelly bank along railroad, July 24, 1910.

#### SARRACENIACEAE.

Sarracenia purpurea L. About Mud Lake in a tamarack swamp, Starke Co., Sept. 17, 1915.

## CRASSULACEAE.

Penthorum sedoides L. One mile east of Russellville in railroad ditch, July 24, 1910.

Sedum ternatum Mx. Five miles south of Russellville in moist rocky ravine, May 29, 1910.

#### SAXIFRAGACEAE.

- Heuchera americana L. Four miles east of Russellville on dry exposed hillside, May 22, 1910.
- Hydrangea arborescens L. Four miles south of Russellville on rocky hillside along Raccoon Creek, July 10, 1910.
- Hydrangea cinerea Small. At the "Shades", moist hillside, Montgomery Co., July 23, 1911.
- Hydrangea deamii (Small) St. John. Two miles northeast of Bainbridge on a moist shaly hillside near "Devil's Backbone", Aug. 15, 1911.
- Mitella diphylla L. Five miles south of Russellville on sandstone cliffs in a ravine, April, 1910 and 1911.
- Parnassia caroliniana Mx. Along Tippecanoe River near Round Lake in a muck swamp, Starke Co., Aug. 31, 1915.
- Ribes cynosbuti L. North and south of Russellville in rich woods, April, 1910 and 1911.
- Ribes floridanum L'Her. Four miles south of Russellville in open woods May 18, 1911.
- Saxifraya pennsylvanica L. Three miles south of Russellville in a swamp, May 18, 1911.

## HAMAMELIDACEAE.

- Humanclis virginiana L. East of Russellville on wooded hillsides, Nov. 6, 1910, and June 18, 1911.
- Liquidambar styraciflua L. Two miles southeast of Cloverdale along roadside, Aug. 15, 1911. Single tree.

# PLATANACEAE.

Platanus occidentalis L. Three miles south of Russellville on open hillside, May 22, 1911.

#### ROSACEAE.

- Agrimonia parviflora Ait. One mile east of Russellville in low wet grounds, Sept. 1, 1911.
- Agrimonia rostellata Wallr. Four miles east of Russellville in rich dense woods, June 24, 1910.
- Amelanchier canadensis (L.) Medic. Five miles south of Ruscellville wooded hillside along Raccoon Creek, Sept. 4, 1910.
- Crataegus calpodendron (Ehr.) Medic. East and south of Russellville in rich beech woods, Sept. and Oct., 1911.
- Crataegus crus-galli L. Eel River Falls at Cataract on dry sterile bluff, Owens Co., Aug. 12, 1911.
- Crataegus mollis (T. & G.) Scheele. North and cast of Russellville in beech woods, May and Sept., 1911.
- Cratuegus pruinosa (Wendl.) C. Koch. Four miles south of Russell-ville on dry wooded hillside, July 30, 1911.

- Crataegus punctata Jacq. Collected around Russellville, flowers May; and fruit Sept., 1911.
- Crataegus succulenta Schrad. Three miles south of Russellville on wooded hilltop, Sept. 3, 1911.
- Filipendula rubra (Hill) Rob. One mile west of Goldsmith in low moist ground, Tipton Co., July 14, 1912. Frequent.
- Fragaria vesca, var. americana Porter. Five miles south of Russell-ville on a dry sandstone ledge, May 11, 1910.
- Fragaria virginiana, var. illinoensis (Prince) Gray. South of Russell-ville in sandy soil along Raccoon Creek, May 14, 1910.
- Geum canadense Jacq. Four miles east of Russellville on border of woods, June 19, 1910.
- Geum flavum (Porter) Bick. South of Russellville in rich wooded ravine, July, 1910 and 1911.
- Geum macrophyllum Willd. Two miles east of Tipton, moist rich soil along L. E. & W. R. R., June 9, 1912.
- Geum vernum (Raf.) T. & G. East of Russellville in moist wood, common, April 20, 1910.
- Geum virginianum L. Washington Township one mile above mouth of Mill Creek in low swampy bottom, Aug. 9, 1911.
- Physocarpus opulifolius (L.) Maxim. Near Crawfordsville in alluvial soil along Sugar Creek, June 15, 1910.
- Potentilla anserina L. West of Tipton in yards of L. E. & W. R. R., June 17, 1912. Several plants seen.
- Potentilla argentea L. One mile west of Brems on a dune-like hill, Knox Co., Aug. 24, 1915. Very characteristic.
- Potentilla arguta Pursh. Northwest of Pence on state line along roadside in low prairie ground, Warren Co., July 24, 1914.
- Potentilla canadensis L. Five miles south of Russellville in dry soil on edge of woods, May 11, 1910.
- Potentilla monspeliensis L. Four miles east of Russellville in dry soil along railroad, and south in sandy fields, July, 1910 and 1911.
- Potentilla recta L. Five miles southeast of Tipton in an orchard, Tipton Co., June 15, 1915.
- Prunus americana Marsh. Three and a half miles south of Russellville on wooded hillside with Amelanchier canadensis, April 23, 1911. South portion of Washington Township along roadside, Aug. 17, 1911.
- Prunus pumila L. Two miles south of Hamlet in a swamp on Clyde fine sand, Starke Co., July 26, 1915.
- Prunus serotina Ehrh. East and south of Russellville in open fields, May, 1910 and 1911.
- Prunus virginiana L. Turkey Run, on moist sandstone cliff at the Narrows, Parke Co., July 1, 1911. Washington Township one mile above mouth of Mill Creek, on wooded limestone ledge, Aug. 9, 1911.
- Pyrus arbutifolia, var. atropurpurea (Brit.) Rob. Shores of Mud Lake in a muck swamp, Starke Co., Sept. 17, 1915.
- Pyrus coronaria L. Near Russellville, April, 1910, and May, 1911.
- Pyrus ioensis (Wood) Bailey. Two miles west of Greencastle on embankment of old Big Four R. R., Aug. 27, 1911. About 8 feet high.

- Pyrus malus L. Three miles south of Russellville on open hillside, May 7, 1911.
- Pyrus melanocarpa (Mx.) Willd. Six miles east of Knox in a sandy swamp thicket along roadside, Starke Co., Aug. 25, 1915.
- Rosa blanda Ait. Near Crawfordsville on dry bank of old Big Four R. R., below overhead bridge, June 4, 1911.
- Rosa carolina L. Five miles south of Russellville on dry hillside, July 9, 1911.
- Rosa humilis Marsh. West of Goldsmith frequent along right of way of L. E. & W. R. R., Tipton Co., July 14, 1912. Banks of Wabash River in low sandy soil, Parke Co., July 2, 1911.
- Rosa rubiginosa L. Three miles south of Russellville on dry open hillside, June 24, 1911. Four miles south of Russellville on edge of swamp in Raccoon Creek, May 18, 1911.
- Rosa setigera Mx. One mile east of Russellville on border of low woods, July 10, 1910.
- Rosa virginiana Mill. One mile north of Russellville in a fence row, Montgomery Co., July 7, 1910.
- Rubus allegheniensis Porter. Collected around Russellville on open hillsides, May and June, 1911.
- Rubus flagellaris Willd. Around Russellville in fields, May, 1911. Near Tipton on dry silt knoll along L. E. & W. R. R., Tipton Co., June 9, 1912.
- Rubus occidentalis L. Four miles east of Russellville on rich wooded hillside, May 22, 1910. One mile north in rich deep woods, Montgomery Co., May 20, 1911.
- Rubus pergratus Blanch. Four miles south of Russellville on poor open hillside, flowers, May 22, and fruit, June 11, 1911.
- Spiraea salicifolia L. West of Goldsmith along L. E. & W. R. R. in low rich soil, Tipton Co., July 14, 1912.
- Spiraea tomentosa L. Five miles southwest of Knox, in a muck swamp, Starke Co., Aug. 7, 1915. Very common in county.

#### LEGUMINOSAE.

- Amorpha cancseens Pursh. Two miles east of Judyville along roadside on prairie, Warren Co., July 23, 1914. At junction of Pine Creeks on a dry sandstone ledge.
- Amphicarpa monoica (L.) Ell. East of Russellville in dense woods, Sept. 1, 1910. Four miles south in a swamp, Sept. 3, 1911.
- Apios tuberosa Moench. Four miles south of Russellville in a swamp, Sept. 3, 1911.
- Baptisia leucantha T. & G. West of Goldsmith along L. E. & W. R. R. on a dry bank, Tipton Co., July 14, 1915. Infrequent.
- Cassia chamaecrista L. Ballasted bank along Monon R. R. near Crawfordsville, Montgomery Co., Aug. 9, 1910.
- Cassia marylandica L. Five miles south of Russellville in fence row along roadside, July 29, 1910. Near Fern along old Big Four R. R.
- Cereis canadensis L. Four miles south of Russellville along Raccoon Creek, April 30, 1911.

- Desmanthus illinoensis (Mx.) MacM. Near Fern, on right of way of old Big Four R. R., Aug. 8, 1911. Just west of Crawfordsville along railway bank, Montgomery Co., June 4, 1911.
- Desmodium bracteosum (Mx.) DC. Three miles south of Russellville in rich woods, Aug. 28, 1910.
- Desmodium canadense (L.) DC. Washington Township in sandy alluvial soil along Mill Creek, Aug. 10, 1911. Near Goldsmith on dry knoll along L. E. & W. R. R., Tipton Co., July 14, 1915.
- Desmodium grandiflorum (Walt.) DC. Four miles east of Russellville in low rich woods, July 24, 1910.
- Desmodium nudiflorum (L.) DC. Five miles south of Russellville on dry rocky hillside with Tsuga, July 29, 1910.
- Desmodium paniculata, var. pubens T. & G. Four miles south of Russell-ville in deep woods, Aug. 28, 1911.
- Desmodium pauciflorum (Nutt.) DC. North of Russellville in rich woods, Sept. 4, 1910. Three miles south in deep moist ravine, July 30, 1911.
- Desmodium rotundifolium (Mx.) DC. Three miles south of Russell-ville on a wooded hillside, June 12, 1911.
- Desmodium sessilifolium (Torr.) T. & G. Three miles east of Knox on sand hills along L. E. & W. R. R., Starke Co., Aug. 20, 1915.
- Gleditsia triacanthos L. Three miles south of Russellville in open woods pasture, May 24, 1911. Sandy flood plain of Raccoon Creek, Sept. 3, 1911.
- Gymnocladus dioica (L.) Koch. Three miles south of Russellville in a deep open ravine, May 24, 1911.
- Lathyrus palustris L. Rocky damp hillside along Sugar Creek, Parke, Co., July 4, 1910.
- Lespedeza capitata Mx. West of Goldsmith in dry silt along L. E. & W. R. R., Tipton Co., Aug. 18, 1915. Scarce.
- Lespedeza frutescens (L.) Brit. Sugar Creek near Crawfordsville on dry hillside, Montgomery Co., Aug. 9, 1910. Washington Township on dry wooded bank of Mill Creek, Aug. 9, 1911. Two miles northeast of Bainbridge on high dry wooded hill, Aug. 15, 1911.
- Lespedeza procumbens Mx. Washington Township near mouth of Mill Creek on dry wooded hillside, Aug. 9, 1911.
- Lespedeza violacea (L.) Pers. One and a half miles west of Goldsmith on dry silt, Tipton Co., Aug. 18, 1915.
- Lupinus perennis L. Five miles east of Knox on sandy hill along roadside, Starke Co., July 29, 1915.
- Medicago sativa L. Dry hillside along Sugar Creek near Crawfordsville, Montgomery Co., Aug. 9, 1910. Near Fern, Aug. 8, 1911.
- Melilotus alba Desr. Along roadside near Russellville, July 17, 1910.
  Melilotus officinalis (L.) Lam. Roadside near Russellville, May, 1910.
  Petalostemon purpureum (Vent.) Rydb. Near Goldsmith on dry Miami silt knoll, Tipton Co., July 14, 1914.
- Psoralia onobrychis Nutt. Near Crawfordsville along roadside and on dry hill at Crinoid beds, Aug. 9, 1910. Open damp ravine at Turkey Run, Parke Co., July 2, 1911. Five miles south of Russell-ville on a clay hillside, Oct. 30, 1910.

Robinia pseudo-acacia L. One mile east of Russellville, July 30, 1911. Strophostyles helvola (L.) Brit. West of Greencastle on ballasted bank of Monon R. R., Aug. 27, 1911. Three miles south of Russellville in sandy bottom field, Sept. 3, 1911.

Strophostyles pauciflora (Benth.) Wats. Five miles west of Greencastle along old Big Four R. R. right of way, Oct. 4, 1911. Near Fern,

Aug. 1911.

Tephrosia virginiana (L.) Pers. Five miles east of Knox on a sand hill, Starke Co., July 20, 1915.

- Trifolium agrarium L. Three miles south of Kempton in wheat, July 16, 1912.
- Trifolium arvense L. One mile south of Hamlet along roadside, July, 1915.
- Trifolium hybridum L. Four miles east of Russellville along roadside, Sept. 24, 1911.
- Trifolium pratense L. Along roadside one mile east of Russellville, July 30, 1911.
- Trifolium procumbens L. In streets of Crawfordsville, Montgomery Co., June 15, 1910. Near Greencastle along old Big Four R. R., Aug. 27, 1911. In Tipton along L. E. & W. R. R., Tipton Co., July 9, 1915.

Vicia sativa L. Weed in Russellville, July 8, 1914. Vicia villosa Roth. Weed in Russellville, July 8, 1914.

# LINACEAE.

Linum virginianum L. Two miles northeast of Bainbridge on high dry wooded hillside, June 25, 1911.

#### OXALIDACEAE.

Oxalis corniculata L. Near Russellville in waste ground, Oct. 18, 1911.

Oxalis stricta L. Four miles east of Russellville, rich wooded hillside,
May 22, 1910.

Oxalis violacea L. Three miles south of Russellville on rocky hillside, May 21, 1911.

Geranium carolinianum L. Three miles west of Greencastle along right of way of old Big Four R. R., June 4, 1911.

Geranium maculatum L. Five miles south of Russellville in rich shaded soil, May 14, 1910.

#### RUTACEAE.

Ptelia trifoliata L. East of Russellville in low pasture, June, 1910.Zanthoxylum americanum Mill. Collected around Russellville in July, 1910, and Sept., 1911.

# SIMARUBACEAE.

Ailanthus glandulosa Desf. Near Waveland along Indiana Central R. R. crossing, Sept. 12, 1910. Near Greencastle along traction lines, Aug., 1911. At Hebron, 1911.

#### POLYGALACEAE.

- Polygala sanguinea L. Sterile hillside north of Fern, Aug. 8, 1911. Two miles south of Hamlet in swampy sandy flat, Starke Co., July 26, 1915. Indicator of soil acidity.
- Polygala senega L. In damp soil at foot of slopes near Raccoon Creek south of Russellville, July 24, 1911, and July, 1910.
- Polygala verticillata L. Dry open clay hillside north of Fern, Aug. 8, 1911. West of Goldsmith in ditch along L. E. & W. R. R., Tipton Co., July 14, 1912. About Mud Lake on wooded sandy ridge, Starke Co., Sept. 17, 1915.

# EUPHORBIACEAE.

- Acalypha virginica L. One mile east of Russellville along C. H. & D. R. R., Sept. 3, 1911.
- Croton glandulosa L., var. septontrionalis Muell. Arg. Aug. 27, 1911.
  Three miles west of Greencastle on bank of old Big Four R. R.
  Croton monanthogynus Mx. Near Fern along old Big Four R. R. right of way, Aug. 8, 1911.
- Euphorbia commutata Engelm. Moist shaly hillside along Sugar Creek at "The Shades", July 23, 1911. Near Lafayette, dry open hillside, Tippecanoe Co., May 15, 1915.
- Euphorbia cyparissias L. Greencastle in waste ground, Aug. 27, 1911.
  Euphorbia heterophylla L. Near Fern on right of way of old Big Four R. R., Aug. 8, 1911.
- Euphorbia maculata L. Two miles northeast of Bainbridge along Walnut Creek, Aug. 15, 1911.
- Euphorbia preslii Guss. One mile east of Russellville along railroad, Aug. 21, 1910.
- Euphorbia corollata L. Ballasted bank of Monon R. R. near Crawfordsville, Montgomery Co., Aug. 9, 1910. Embankment of Monon R. R. four miles south of Bainbridge, Aug. 14, 1911.

# LIMNATHACEAE.

Floerkea proserpinacoides Willd. East of Russellville in low damp shaded soil, April 20, 1910. South of Russellville in deep moist ravine, May 7, 1911.

#### ANACARDIACEAE.

- Rhus canadensis Marsh. Near junction of Pine Creek on a dry sandstone ledge, Aug. 12, 1914. Happy Hollow near Lafayette, Tippecanoe Co., Apr. 24, 1915.
- Rhus copallina L. Four miles south of Russellville on open clay hill, Oct. 5, 1910. Two miles north of Bainbridge on high, dry bluff with Gaylussacia baccata.
- Rhus glabra L. South of Russellville in a pasture, July 10, 1910.
- Rhus toxicodendron L. Four miles east of Russellville on dry hillside, creeping form, July 19, 1910. Four miles west of Greencastle on embankment of old Big Four R. R., June 4, 1911.

Rhus typhina L. Rocky hillside at "The Shades", Montgomery Co., Sept., 1910.

Rhus vernix L. Three miles north of Noblesville, Hamilton Co., Sept. 8, 1912. Common in peat bog.

## CELASTRACEAE.

- Celastrus scandens L. Four miles south of Russellville on wooded hillside, July 12, 1910. Two miles east on sandstone ledge.
- Evonymus atropurpareus Jacq. Five miles south of Russellville in open woods, June 7, 1910.
- Evonymus obovatus Nutt. East of Russellville in open woods, Apr. 20, 1910.

#### STAPHYLEACEAE.

Staphlea trifoliata L. Five miles south of Russellville on rich shady slope near Raccoon Creek, Apr. and May, 1910.

## ACERACEAE.

- Acer negando L. Three miles south of Russellville along Raccoon Creek, Sept., 1910. Frequent.
- Acer rubrum L. Four miles east of Russellville on high hill, Apr. 16, 1911.
- Acer saccharum Marsh. Four miles east of Russellville on dry hillside, Sept. 14, 1911.
- Acer succharum L. Three miles south of Russellville on dry hillside, May 7, 1911.
- Acer succharum, var. nigrum (Mx. f.) Britton. Flood plain thicket of Raccoon Creek south of Russellville, June 30, 1911.

## SAPINDACEAE.

Acsculus glabra Willd. Three miles northeast of Russellville in open woods, Montgomery Co., Apr. 24, 1910. Flood plain thicket of Raccoon Creek south of Russellville, July 10, 1911.

#### BALSAMINACEAE.

Impatiens biflora Walt. One mile east of Russellville, Sept. 1, 1910.

#### RHAMNACEAE.

Ceanothus americanus L. West of Goldsmith along L. E. & W. R. R. on Miami silt, Tipton Co., July 14, 1912.

## VITACEAE.

- Psedera quinquefolia (L.) Greene. Four miles south of Russellville on wooded hillside, June 18, 1911.
- Vitis aestivalis Mx. Three miles south of Russellville on wooded slope June 11, 1911. Poor dry hillside at "Snakes Den" south of Russellville, Oct. 8, 1911.

- Vitis cordifolia Mx. Four miles south of Russellville on limestone, June, 1910 and 1911.
- Vitis vulpina L. Collected from around Russellville in June and Sept., 1910, and May, 1911.

## TILIACEAE.

Tilia americana L. Three miles south of Russellville on rich hillside, July 10, 1910.

# MALVACEAE.

Abutilon theophrasti Medic. Weed in Russellville, Oct. 5, 1910.

Hibiscus lasiocarpos Cav. Along Wabash River at mouth of Sugar Creek on border of swamp, Parke Co., Aug. 17, 1911.

Hibiseus militaris Cav. Two miles north of Belle Union beside small pond by roadside, Aug. 13, 1911.

Hibiscus trionum L. Weed in Russellville, Sept. 10, 1911.

Malva rotundifolia L. Crawfordsville in a lawn, Montgomery Co., Aug. 9, 1911. Weed in Russellville, Aug. 17, 1911.

Sida spinosa L. Three miles south of Russellville in sandy soil, Sept. 18, 1910.

# HYPERICACEAE.

Hypericum ascyron L. At "The Shades", moist shaly hillside, Montgomery Co., July 23, 1911. Two miles east of Bainbridge, sandy alluvial soil along Walnut Creek, Aug. 15, 1911.

Hypericum cistifolium Lam. On dry bank of Wabash River near mouth of Sugar Creek, Vermillion Co., Aug. 17, 1910. "The Shades", on rocky shore of Sugar Creek, Montgomery Co., July 23, 1911.

Hypericum gentianoides (L.) BSP. Two miles north of Knox, weed in field in acid soil, Starke Co., Aug. 25, 1915.

Hypericum mājus (Gray) Britton. South shore of Bass Lake, Starke Co., Aug. 21, 1915.

Hypericum mutilum L. Along Wabash River near mouth of Sugar Creek, in cultivated field, Parke Co., Aug. 17, 1910.

Hypericum perforatum L. Three miles south of Russellville on dry hill, July 31, 1910.

Hypericum punctatum Lam. Four miles east of Russellville on wooded hillside, July 24, 1910.

# CISTACEAE.

Lechea racemulosa Lam. South shore of Bass Lake on a sandy knoll, Starke Co., Aug. 21, 1915.

Lechea villosa Ell. Near junction of Pine Creeks on a dry sandstone cliff with Rhus canadensis, Warren Co., Aug. 12, 1914.

#### VIOLACEAE.

Hybanthus concolor (Forster) Spreng. Three miles east of Russellville, dry open hillside, May 1, 1910.

Viola eriocarpa Schwein. Four miles south of Russellville on rich wooded slope, May 5, 1912.

- Viola pedata L. Seven miles east of Knox, sandhill along roadside, Starke Co., Aug. 25, 1915.
- Viola sororia Willd. Collected south and east of Russellville along Raccoon Creek, Apr., 1910, and May, 1911, 1912. Along Wabash River at Flint, dry rocky soil, Fountain Co., May 19, 1914.
- Viola striata Ait. South and east of Russellville along Raccoon Creek, May, 1910, and Apr., 1911.
- Viola triloba Schwein. Five miles south of Russellville in rich soil in dense woods, May 29, 1910. Three miles east in wooded ravine, May 12, 1912.

# PASSIFLORACEAE.

Passiflora lutea L. Five miles south of Russellville along Raccoon Creek, dry rich soil of wooded slope, Sept. 4, 1910.

# THYMELAEACEAE.

Direa palustris L. Wooded hillside along Raccoon Creek southeast of Russellville, July, 1910, and May, 1911.

# LYTHRACEAE.

Lythrum alatum Pursh. North of Tipton in low ground along L. E. & W. RR., June 9, 1912, and one mile west of Goldsmith in low wet ground Tipton Co., Aug. 18, 1912.

#### MELASTOMACEAE.

Rhexia virginica L. Five and a half miles southwest of Knox, abundant on Clyde fine sand, Starke Co., Aug. 7, 1915.

# ONAGRACEAE.

- Circaea alpina L. "The Shades" on a decaying log in deep ravine, Montgomery Co., July 23, 1911.
- Circaea lutetiana L. "The Shades" in rich deep ravine, Montgomery Co., July 4, 1910.
- Epilobium angustifolium L. Two miles south of Hamlet in burned over thicket, Starke Co., July 26, 1915.
- Epilobium coloratum Muhl. Four miles south of Russellville in low moist ground, Aug. 21, 1910.
- Gaura biennis L. Bank of Wabash River near mouth of Sugar Creek, Parke Co., Aug. 17, 1910. Near Raccoon Creek along C. H. & D. RR., Sept. 10, 1911.
- Ludrigia alternifolia L. Three miles south of Hamlet in undrained Clyde fine sandy loam, Starke Co., July 26, 1915.
- Ludvigia palustris (L.) Ell. One mile east of Russellville along a stream, Sept. 1, 1910.
- Oenothera biennis L. One mile north of Russellville on border of a field, Montgomery Co., July 17, 1910. One mile east of Russellville along railway, July 30, 1911. Near Fern on right of way of old Big Four RR., Oct. 4, 1911.
- Oenothera muricata L. One mile east of Goldsmith in low ground along L. E. & W. RR., Tipton Co., July 14, 1912.

#### ARALIACEAE.

- Aralia hispida Vent. Two miles south of Hamlet in burned over thicket. Starke Co., July 26, 1915.
- Aralia nudicaulis L. Five miles south of Russellville on dry rocky hillside with Tsuga, Sept. 4, 1910. South of Russellville on sandstone ledge along Raccoon Creek, May 28, 1911.
- Aralia racemosa L. Five miles south of Russellville, rich soil in deep woods, July 29, 1910.
- Panax quinquefolium L. Three miles south of Russellville in deep woods, May 8, 1910.

## Umbelliferae.

- Aethusa cynapium L. Three miles south of Russellville in rich moist soil in ravine, May 8, 1910.
- Angelica atropurpurea L. South of Russellville, July 3, 1911.
- Chaerophyllum procumbens (L.) Crantz. East and south of Russell-ville in low ground near Raccoon Creek, May, 1910, 1911 and 1912.
- Cicuta maculata L. One mile north of Russellville in low ground, Montgomery Co., July 17, 1910.
- Conioselinum chinensis (L.) BSP. "The Shades" on a rocky hillside along Sugar Creek, Montgomery Co., Sept. 25, 1910.
- Cryptotaenia canadensis (L.) DC. "The Shades" in rich deep ravine, Montgomery Co., July 4, 1910.
- Daucus carota L. Near Russellville along roadside, July 30, 1911.
- Erigenia bulbosa (Mx.) Nutt. East of Russellville in rich soil of woods, Apr. 24, 1910. Near mouth of Ramp Creek, in deep ravine, Apr., 1911.
- Eryngium yuccifolium Mx. West of Goldsmith on Miami silt knoll along L. E. & W. RR., Tipton Co., July 14, 1912.
- Osmorhiza claytoni (Mx.) Clark. At "The Shades" in rich deep ravine, Montgomery Co., July 4, 1910.
- Oxypolis rigidior (L.) Coult. & Rose. Four miles south of Russellville in a swamp, Aug. 21, 1910. Along Raccoon Creek, on wooded hill-side, July 30, 1910.
- Sanicula canadensis L. East and south of Russellville on rich woodland, Sept., 1910, and July, 1911.
- Taenidia integeriima (L.) Drude. Near Crawfordsville on dry hillside near Crinoid beds, Montgomery Co., July 15, 1910.
- Thaspium aureum Nutt. West of Goldsmith on Miami silt along L. E. & W. RR., Tipton Co., July 14, 1912. Bainbridge, July 20, 1911.
- Thaspium barbinode (Mx.) Nutt. Five miles south of Russellville on wooded hill, July 9, 1911.

#### CORNACEAE.

- Cornus alternifolia L.f. Wooded hillside along Raccoon Creek south of Russellville, May 11, 1910.
- Cornus florida L. Four miles south of Russellville on dense wooded slope, May 1, 1910.

- Cornus paniculata L'Her. South of Russellville along Raccoon Creek, June, 1910 and 1911. Three miles north of Tipton on border of oak woods, Tipton Co., June 9, 1912.
- Nyssa sylvatica Marsh. Four miles east of Russellville in open woods, May, 1910. Near Fern on dry wooded hill, Oct. 4, 1911. One mile north of Ferndale. Three miles north of West Union on wooded hillside, Aug. 18, 1910.

# ERICACEAE.

- Andromeda glaucophylla Link. About Mud Lake, floating bog, Starke Co., Sept. 17, 1915.
- Chamaedaphne calyculata (L.) Moench. About Mud Lake in muck, Starke Co., Sept. 17, 1915.
- Chimaphila maculata (L.) Pursh. One mile north of Ferndale in rich dry woods, Parke Co., Sept. 11, 1910.
- Gaylussacia baccuta (Wang.) C. Koch. Two miles northeast of Bainbridge along Walnut Creek, on high bluff at "Snowdon Springs", June 25, 1911.
- Monotropa uniflora L. Four miles south of Russellville on rich hillside along Raccoon Creek, Oct. 9, 1910. Happy Hollow northwest of Lafayette, on oak slope, Tippecanoe Co., May 18, 1914.
- Vaccinium corymbosum L., var. amocnum (Ait.) Gray. "The Shades" on very dry bluff at "Devils Backbone", Montgomery Co., Sept. 25, 1910.
- Vaccinium vacillans Kalm. Washington Township along Mill Creek on dry rocky hillside, Aug. 9, 1911. Two miles south of Hamlet, Starke Co., July 26, 1915.

# PRIMULACEAE.

- Dodecatheon meadia L. Four miles east of Russellville on wooded hill-side, May 1, 1910.
- Lysimachia numundaria L. Near Russellville along a stream.
- Samolus floribundus H.B.K. South and east of Russellville along streams, July, 1910, June, 1911.
- Steironema ciliatum (L.) Raf. "The Shades" on rocky hillside along Indian Creek in alluvial soil, Montgomery Co., July 4, 1910. One mile north of Russellville in damp low woods, July 17, 1910.
- Steironema lanceolatum (Walt.) Gray. Two miles northeast of Bain-bridge on dry open hillside, June 25, 1911.
- Steironema quadriflorum (Sims.) Hitchc. West of Goldsmith on right of way of L. E. & W. RR., Tipton Co., Aug. 18, 1912.

#### OLEACEAE.

- Frazinus americana L. Around Russellville in open woods, April and May, 1910 and 1911.
- Frazinus nigra Marsh. South of Russellville in swamps near Raccoon Creek, May and June, 1911.
- Fraxinus pennsylvanica, var. lanceolata (Borkh.) Sarg. South and east of Russellville in flood plains, May and June, 1911.
- Fraxinus quadrangulata Mx. Around Russellville, April, 1910 and 1911.

Ligustrum vulgare L. Near Crawfordsville in hedge on clay hillside, Montgomery Co., July 15, 1910.

#### GENTIANACEAE.

- Gentiana andrewsii Griseb. Three miles south of Russellville near Raccoon Creek, Sept. 18, 1910. "The Shades" in damp ravine, Montgomery Co., Sept. 25, 1910.
- Gentiana quinquefolia L. South of Russellville on sandy clay hillside along Raccoon Creek, Oct. 8, 1911.
- Gentiana saponaria L. Washington Township near mouth of Ramp Creek, in sandy bottom field, Aug. 9, 1911.

# APOCYNACEAE.

- Apocynum androsaemifolium L. West of Greencastle on dry bank of old Big Four RR., June 4, 1911.
- Apocynum cannabinum L. One mile north of Ferndale along roadside, Parke Co., Sept. 11, 1910. Three miles south of Marshall on dry rocky shore of Sugar Creek, Parke Co., July 2, 1911. Open pasture near Russellville.

# ASCLEPIADACEAE.

- Acerates hirtella Dennall. West of Goldsmith along L. E. & W. RR. in low moist ground, Tipton Co., July 14, 1912.
- Asclepias incarnata L. Three miles south of Russellville along a stream bank, July 31, 1910.
- Asclepias phytolaccoides Pursh. Four miles south of Russellville along wooded hillside, June 11, 1911.
- Asclepias sullivantii Engelm. One mile west of Bainbridge in open pasture with A. syriaca, June 25, 1911.
- Asclepias syriaca L. Near Russellville in fields, July, 1910, Aug., 1911. Asclepias verticillata L. Six miles northwest of Noblesville along La-
- fayette road on dry gravelly hillside, Sept. 8, 1912, Hamilton Co. Northeast of Tab in pasture on open prairie, Warren Co., July 28, 1914.
- Gonolobus laevis Mx. Four miles south of Russellville in a barn lot, July, 1915.

# CONVOLVULACEAE.

Convolvulus arvensis L. In waste ground in Tipton, Tipton Co., June 23, 1912. In lawn in Russellville, July 8, 1914.

Convolvulus japonicus Thunb. Three miles north of Tipton along L. E. & W. RR., scarce, Tipton Co., June 9, 1912.

Convolvulus sepium L. Three miles south of Russellville in a swamp, July 30, 1911.

Cuscuta gronovii Willd. South of Russellville along Raccoon Creek on Impatiens, Sept. 4, 1910. South of Russellville in a swamp, Sept. 3, 1911.

Ipomoea pandurata (L.) G. F. Mey. Near Fern on old Big Four RR., Aug. 8, 1911.

Ipomoea purpurea (L.) Roth. Weed in Russellville, Sept. 3, 1911.

#### POLEMONIACEAE.

- Gilia rubra (L.) Heller. Eight miles east of Knox on a sandhill, Starke Co., Aug. 25, 1915.
- Phlox bifida Beck. Along Wabash River at Flint in dry rocky soil, Fountain Co., May 19, 1914. Happy Hollow northwest of Lafayette on a dry sandhill, Tippecanoe Co., Apr. 17, 1915.
- Phlox divaricata L. Two miles east of Russellville in rich moist woods, Apr. 24, 1910.
- Phlox glaberrina L. Five miles southwest of Knox, on swampy fine Clyde sand, Starke Co., Aug. 7, 1915.
- Phlox paniculata L. Dry alluvial soil along Raccoon Creek south of Russellville, July 10, 1910. Two miles northeast of Bainbridge, dry alluvial soil along Walnut Creek, June 25, 1911.
- Phlox pilosa L. Near Goldsmith, moist bank of L. E. & W. RR., Tipton Co., July 14, 1912. Happy Hollow northwest of LaFayette on dry hilltop, Tippecanoe Co., May 18, 1914.
- Polemonium reptans L. North and east of Russellville in rich woods, Apr., 1910, and May, 1911.

## HYDROPHYLLACEAE.

- Hydrophyllum appendiculatum Mx. Five miles south of Russellville on moist shaly hillside in woods, May 14, 1910.
- Hydrophyllum canadense L. Two miles south of Carpentersville on Big Walnut Creek, in deep moist ravine, Aug. 16, 1911.
- Hydrophyllum rirginianum L. Two miles northeast of Russellville in fence row, June 7, 1910.
- Phacelia bipinnatifida Mx. Four miles east of Russellville in rich damp ravine, May 1, 1910. Five miles south, Apr. 17, 1910.
- Phacetia purshii Buckley. Four miles east of Russellville in woods, May 22, 1910. In Russellville, 1911.

# BORAGINACEAE.

- Cynoglossum officinule L. Three miles south of Russellville in open hilly pasture, June 12, 1910.
- Lappula virginiana (L.) Greene. Near Russellville in woodland pasture, July 24, 1910. Along Wabash RR. at West Lebanon, Warren Co., July, 1914.
- Lithospermum angustifolium Mx. South of Roachdale on dry bank along Monon RR. Tippecanoe Co., May 11, 1915.
- Lithospermum arvense L. Along Monon RR. near Ladoga, Montgomery Co., May 5, 1911. Near Russellville station, May 18, 1911.
- Lithospermum canescens (Mx.) Lehm. Two miles south of LaFayette along Monon RR. embankment, Tippecanoe Co., May 11, 1915.
- Mertensia virginica (L.) Link. Raccoon Creek bank south of Russellville, May, 1910, and Apr., 1911.
- Myosotis virginica (L.) BSP. Happy Hollow northwest of LaFayette on dry sandy hillside, Tippecanoe Co., May 18, 1915.
- Onosmodium occidentale Mackenzie. Three miles south of Sheridan along I. & L. RR., Hamilton Co., Sept. 8, 1912.

# VERBENACEAE.

- Lippia lanceolata Mx. Four miles east of Russellville in low ground near Raccoon Creek, July 24, 1910.
- Verbena angustifolia Mx. One mile east of Russellville in ditch along railroad, July 10, 1910.
- Verbena bractcosa Mx. Near Fern along old Big Four right of way, Aug. 8, 1911.
- Verbena hastata L. One mile east of Russellville, July 30, 1911. Near Yountsville in alluvial soil along creek, Montgomery Co., Aug. 10, 1910, and "The Shades" on rocky shore of creek, July, 1911.
- Verbena stricta Vent. One mile east of Russellville on bank of railroad, July 10, 1910.
- Verbena urticaefolia L. Roadside in Russellville, Aug. 26, 1911. One mile east in low ground, Sept. 10, 1910.

# LABIATAE.

- Agastache nepetoides (L.) Ktze. Along Raccoon Creek southeast of Russellville in sandy alluvial soil, Sept. 18, 1910.
- Agastache scrophulariaefolia (Willd.) Ktze. Three miles north of Sheridan in fence row, Hamilton Co., Sept. 8, 1912.
- Blephilia ciliata (L.) Raf. Four miles east of Russellville in rich soil in moist woods, June 19, 1910.
- Blephilia hirsuta (Pursh.) Benth. Five miles south of Russellville in deep woods, July 29, 1910.
- Collinsonia canadensis L. Three miles south of Russellville in deep woods, Aug. 28, 1910.
- Hedeoma hispida Pursh. Four miles east of Russellville in barren pasture, June 24, 1914.
- Hedeoma pulegioides (L.) Pers. One mile east of Russellville in open woods, Sept., 1910.
- Isanthus brachiatus (L.) B.S.P. Three miles southeast of Russellville on dry hillside, Aug. 28, 1910.
- Lamium amplexicaule L. Weed in Russellville, June, 1910, and Apr., 1911.
- Leonurus cardiaca L. Near Russellville in waste land, July 17, 1910. Lycopus virginicus L. East of Russellville along a stream, Aug., 1910.
- Marrubium vulgare L. Five miles south of Bainbridge on exposed hillside along Walnut Creek, Aug. 14, 1911.
- Melissa officinalis L. One mile east of Carpentersville along roadside, Parke Co., Aug. 16, 1911.
- Mentha arvensis L., var. canadensis (L.) Briq. Near Russellville along a stream, Sept. 1, 1910.
- Mentha arvensis, var. glabrata (Benth.) Fernald. Along Wabash River at mouth of Sugar Creek, Parke Co., Aug. 17, 1910.
- Mentha piperita L. Near Russellville along a stream, Sept. 1, 1910.
- Mentha spicata L. Near Greencastle along old Big Four RR., Aug. 27, 1911.
- Monarda fistulosa L. One mile north of Russellville in rich woods, July, 1910. Three miles south on moist clay hillside, July, 1911.

- Nepcta cataria L. One mile north of Russellville in rich woods, Montgomery Co., July 17, 1910.
- Nepeta hederacea (L.) Trevisan. Four miles east of Russellville in low ground, May 22, 1910.
- Physostegia parviflora Nutt. Washington Township, along Mill Creek near its mouth in dry hard soil, Aug. 10, 1911.
- Physostegia virginiana (L.) Benth. "The Shades" on dry open bluff, Montgomery Co., Sept. 25, 1910. North of Greencastle along Monon RR., Aug. 27, 1911.
- Prunella vulgaris L. East of Russellville in dry soil along railway, July 24, 1910.
- Pycnanthemum flexuosum (Walt.) B.S.P. Two miles north of Bain-bridge along roadside, June 25, 1911.
- Pycnanthenium pilosum Nutt. Two miles south of Russellville on clay bank along roadside, Aug. 9, 1911.
- Scatellaria canescens Nutt. Three miles south of Russellville in wooded ravine, July 11, 1910. Washington Township near mouth of Mill Creek in waste field. 1911.
- Scutellaria lateriflora L. Near Crawfordsville in a damp ravine, Aug. 9, 1910. Along a stream near Russellville, Sept. 1, 1910.
- Scutellaria versicolor Nutt. Three miles south of Russellville on shaded hillside near Raccoon Creek, June 19, 1910.
- Stachys hyssopifolia Mx. Two miles south of Hamlet in swamp on fine Clyde sandy loam, July 26, 1915, Starke Co.
- Stachus palustris L. One mile east of Russellville along railroad, July 18, 1910.
- Stachys tennifolia Willd. "The Shades" along Sugar Creek, Montgomery Co., July 25, 1911. Four miles south of Russellville in fence row, Aug. 28, 1910.
- Synandra hispidula (Mx.) Britton. Five miles south of Russellville along Raccoon Creek in dense woods, May 29, 1910.
- Teucrium canadense L. Three miles east of Russellville along railroad, July 24, 1910.
- Tenerium occidentale Gray. One mile west of Goldsmith in low swamps, Tipton Co., Aug. 18, 1912.

#### SOLANACEAE.

Datura stramonium L. Six miles south of Russellville in sandy soil, Oct. 2, 1910.

Datura tatula L. Weed in Russellville, Oct. 2, 1910.

Physalis pubescens L. One mile east of Russellville in open ground, Sept. 1, 1910.

Physalis subglabrata Mack. and Bush. Weed in Russellville, Sept., 1910. Solanum carolinense L. Woods pasture in Russellville, Sept., 1910.

Solanum nigrum L. Three miles south of Russellville on wooded hill, Sept. 18, 1910.

Solanum rostratum Dunal. Half a mile east of Sheridan in corn, Hamilton Co., Sept. 8, 1912. South of Hebron in a lawn, Aug., 1919.

## SCROPHULARIACEAE.

- Chelone obliqua L. Three miles south of Russellville in low ground on edge of woods, Aug. 28, 1910.
- Collinsia verna Nutt. Three miles southeast of Russellville in rich soil, Aug. 28, 1910.
- Gerardia tenuifolia Vahl. Three miles south of Russellville in deep moist ravine, Aug. 21, 1910.
- Gerardia virginica (L.) B.S.P. Sugar Creek near Crawfordsville on rich wooded hillside, Montgomery Co., Aug. 9, 1910. Washington Township near mouth of Mill Creek, on dry wooded hillside, Aug. 9, 1911.
- Ilysanthes dubia (L.) Barnhart. Four miles south of Russellville along Raccoon Creek, July 24, 1911.
- Linaria vulgaris Hill. Near Crawfordsville in gravelly bank of Monon RR., Montgomery Co., June 15, 1910. On old Big Four RR. right of way east of Greencastle, Aug. 27, 1911.
- Minulus alatus Ait. Shore of Wabash River near mouth of Sugar Creek, Parke Co., Aug. 17, 1910.
- Minulus ringens L. Four miles east of Russellville, moist soil on edge of woods, July 24, 1910.
- Pedicularis canadensis L. South of Russellville on dry hillside, May 8, 1910.
- Pedicularis lanceolata Mx. South of Russellville in a swamp, Aug., 1911.Pentstemon canescens Britton. Three miles west of Greencastle in low ground along new Big Four RR., June 4, 1911.
- Pentstemon hirsutus (L.) Willd. "The Shades" on shaly hillside along Sugar Creek, Montgomery Co., July 4, 1910.
- Pentstemon lacvigatus Ait. One and a half miles east of Tipton in moist soil along L. E. & W. RR., Tipton Co., June 9, 1912.
- Scrophularia marilandica L. One mile north of Russellville in fence row, July 14, 1910. South along Raccoon Creek, Sept. 3, 1911.
- $Seymeria\ macrophylla\ Nutt.$  Three miles south of Russellville on dry hillside, July 31, 1910.
- Verbascum blattaria L. Six miles south of Russellville in dry meadow, July 25, 1911.
- Verbaseum blattaria L., var. albiflorum Ktze. Three miles north of Waveland along roadside, July 4, 1910, Montgomery Co.
- Verbascum thapsus L. One mile east of Russellville in woodland pasture, Sept. 1, 1910.
- Veronica anagallis-aquatica L. Three miles west of Crawfordsville in a pond, Montgomery Co., Aug. 1, 1910. Central part of Clinton Township in small stream, Aug. 7, 1911.
- Veronica arrensis L. Four miles east of Russellville along roadside, May 21, 1910.
- Veronica officinalis L. One mile north of Ferndale in dry beech woods, Parke Co., Sept. 11, 1910.
- Veronica serpyllifolia L. Washington Township near mouth of Walnut Creek, in deep wooded ravine, Aug. 9, 1911.
- Veronica tournefortii C. C. Gmel. Weed in Russellville, Sept. 1, 1910.

Veronica virginica L. Near Goldsmith in moist soil along L. E. & W. RR., Tipton Co., July 14, 1912.

# OROBANCHACEAE.

- Conopholis americana (L. f.) Wallr. Five miles south of Russellville in dense woods on oak roots, June 5, 1910.
- Epifagus virginiana (L.) Bart. One mile east of Russellville on Fagus in flat woods, Sept. 1, 1910.

## BIGNONIACEAE.

Tecoma radicans (L.) Juss. Near Russellville, July 10, 1910.

## ACANTHACEAE.

- Dianthera americana L. "The Shades" on bank of Sugar Creek, Montgomery Co., July 4, 1910. Along Raccoon Creek, south of Russellville, July 30, 1911.
- Ruellia ciliosa Pursh. Four miles south of Bainbridge on right-of-way of Monon R.R., Aug. 14, 1911.
- Ruellia strepens L. Four miles east of Russellville on dry hillside, June 19, 1910.

#### PHRYMACEAE.

Phryma leptostachya L. Five miles south of Russellville in deep woods, June 24, 1910.

#### PLANTAGINACEAE.

- Plantago artistata Mx. Two miles northeast of Bainbridge on rocky hillside, June 25, 1911.
- Plantago elongata Pursh. Three miles southeast of Russellville in old pasture, June 22, 1914.
- Plantago lanceolata L. South of Russellville, in clover field, Aug., 1910.
  Near Raccoon Creek along C. H. & D. RR.
- Plantago major L. In cultivated field two miles south of Russellville, July 30, 1910.
- Plantago rugelii Dene. Near Greencastle along Vandalia RR., Oct., 1911. Plantago virginica L. Weed in Russellville, June 1, 1910.

#### RUBIACEAE.

- Diodia teres Walt. Near Fern on old Big Four RR. right of way, Aug. 8, 1911.
- Galium aparine L. East of Russellville in low woods, Apr. 20, 1910. Galium circaezans Mx. In deep woods south of Russellville, July 1910, 1911.
- Galium concinnum T. & G. Four miles east of Russellville in rich soil in woods, June 19, 1910.
- Galium tinctorum L. One mile east of Russellville along C. H. & D. RR., June 13, 1915.
- Galium triflorum Mx. Five miles south of Russellville in damp ravine, July 9, 1910.

Houstonia purpurea L. South of Russellville, June, 1910, Sept., 1911.
"The Shades" on bank of Sugar Creek, Montgomery Co., July 4, 1911.
Along L. E. & W. RR., west of Goldsmith in ditch, Tipton Co., Aug. 8, 1912.

Mitchella repens L. Five miles south of Russellville on rocky hillside

July 29, 1910.

Lonicera glaucescens Rydb. "The Shades" on rocky hillside, Montgomery Co., Sept. 25, 1910. South of Russellville on dry hillside,
 July 30, 1911. Along state line road one mile north of Pence in low ground of prairie, Warren Co., July 24, 1914.

Sambucus canadensis L. East of Russellville, roadside, June, 1910.

Symphoricarpos orbiculatus Moench. Along Raccoon Creek south of Russellville, in low ground, July 29, 1910.

Triosteum perfoliatum L. Four miles east of Russellville on wooded hillside, May 1, 1910.

Viburnum accrifolium L. Five miles south of Russellville on rocky bank of Raccoon Creek, May 29, 1910.

Viburnum molle Mx. South of Russellville along Raccoon Creek on wooded slope, June 18, 1911.

Viburnum prunifolium L. One mile east of Russellville in thick woods, Apr. 1910, June 1911. Two miles northeast of Bainbridge on wooded hillside along Walnut Creek, June 25, 1911.

Viburnum pubescens Pursh., var. indianese Rehdr<sup>2</sup>.

Viburnum venosum Britt. var. Canbyi Rehder. South of Russellville along Raccoon Creek, on hillside, June 12, 1910.

# VALERIANACEAE.

Valeriana pauciflora Mx. Three miles east of Russellville in very damp ravine, May 22, 1910.

# DIPSACACEAE.

Dipsacus sylvestris Huds. South of Russellville on dry hillside, Aug. 29, 1910.

## CUCURBITACEAE.

Echinocystis lobata (Mx.) T. & G. One mile north of Ferndale in rich woods, Parke Co., Sept. 11, 1910.

Sicyos angulatus L. Waste ground in Crawfordsville, Montgomery Co., Aug. 9, 1910. South of Russellville in damp ravines, Sept. 1910.

# CAMPANULACEAE.

Campanula americana L. Five miles south of Russellville in moist soil of rich woods, July 29, 1910.

Specularia perfoliata (L.) A. DC. Dry open hillzide three miles south of Russellville, June 3, 1911.

Lobelia cardinalis L. East of Russellville along railway ditch, Sept. 18, 1910.

<sup>&</sup>lt;sup>2</sup> According to C. C. Deam, this variety has recently been described from Putnam County specimens sent to the Gray Herbarium by Grimes. It has been assigned number 582b.

- Lobelia inflata L. Three miles south of Russellville on a dry hillside, July 31, 1910.
- Lobelia leptostachys A. DC. West of Goldsmith along L. E. & W. RR., in ditches, Tipton Co., 1912.
- Lobelia siphilitica L. Three miles south of Russellville in low ground, Aug. 21, 1910.

# COMPOSITAE.

- Achillea millefolium L. Near Russellville in dry soil, July 17, 1910.
- Actinomeris alternifolia (L.) DC. Three miles south of Russellville in a swamp, Aug. 21, 1910.
- Ambrosia artemisiifolia L. Sandy alluvial soil along Raccoon Creek, south of Russellville, Oct. 2, 1910. Three miles west of Greencastle, Aug. 27, 1911.
- Antennaria fallux Greene. Three miles south of Russellville on dry open hillside, April 30, 1910. May, 1912.
- Antennaria neglecta Greene. South and east of Russellville on dry open hilltops, April 1911, May 1912.
- Anthemis cotula L. South of Russellville on roadside, Sept., 1911.
- Arctium lappa L. Weed in Russellville, Oct. 2, 1910.
- Artemisia abrotanum L. Three miles west of Carmel in waste ground, Sept. 8, 1910.
- Artemisia annua L. "The Shades" in dry alluvial soil along Sugar Creek, Montgomery Co., Sept. 24, 1910.
- Aster cordifolius L. Russellville in rich woods, Oct. 2, 1910. Near Fern in rich woods, 1911.
- Aster drummondii Lindl. Oct. 8, 1911. Wooded slope along Raccoon Creek, Oct. 8, 1911.
- Aster ericoides L., var. villosus T. & G. North of Russellville in rich woods, Oct. 2, 1910.
- Aster linariifolius L. Rothermal Lake on sandhill on southwest side, Starke Co., Sept. 13, 1915.
- Aster multiflorius Ait. Near Roachdale along right of way of Monon RR., Oct. 5, 1911.
- Aster novae-angliae L. Two miles south of Russellville in low ground, Sept. 18, 1910. Near Roachdale along right of way of Monon RR., Oct. 5, 1911.
- Aster paniculatus Lam. In Russellville along a stream, Oct. 28, 1910. Aster puniceus L. Three miles south of Russellville in a swamp, Sept. 8, 1910.
- Aster sagittifolius Wed. One mile north of Ferndale in deep rich woods, Sept. 1, 1910.
- $Aster\ salicifolius\ Ait.$  East of Russellville along railway on moist bank, Sept. 24, 1911.
- Aster shortii Lindl. One mile north of Ferndale in deep woods, Parke
  Co., Sept. 11, 1910. "The Shades" in sandy soil along Sugar Creek,
  Montgomery Co., Sept. 25, 1910. Four miles east of Russellville,
  Sept., 1911. Bank of Raccoon Creek, south of Russellville, Oct. 8,
  1911.

- Aster tradescanti L. Weed in Russellville, Oct. 2, 1910.
- Aster umbellatus Mill. Three miles north of Noblesville in muck and peat, Hamilton Co., Sept. 8, 1912. Six miles east of Knox on edge of woods, Starke Co., Aug. 25, 1915.
- Bidens aristosa (Mx.) Britt. Four miles south of Russellville along Raccoon Creek, Sept. 10, 1911.
- Bidens bipinnata L. One mile east of Russellville in wet beech woods, Sept., 1910.
- Bidens cernua L. South of Russellville in wet beech wood, Sept., 1911. Bidens laevis (L.) B. S. P. Russellville, Sept. 1, 1910.
- Cacalia atriplicifolia L. Four miles east of Russellville in rich soil along stream, July 24, 1910.
- Cacalia reniformis Muhl. Three miles south of Russellville in swamp. Chrysanthemum balsamita L., var. tanacetoides Boiss. Near Limedale on embankment of Vandalia RR., Oct. 5, 1911.
- Chrysanthemum leucanthemum L. One mile east of Russellville along railroad, July 10, 1910.
- Cichorium intybus L. Along roadside four miles south of Russellville, July 14, 1911.
- Cirsium altissimum (L.) Spreng. Three miles south of Russellville in a swamp, Aug. 21, 1910.
- Cirsium arvense (L.) Scop. At Monon and C. H. & D. railroad crossing at Roachdale on embankment, Aug. 27, 1911.
- Cirsium discolor (Muhl.) Spreng. South of Russellville on dry hillside, Aug. 25, 1910. Near Roachdale on right of way of Monon RR., Oct. 5, 1911.
- Cirsium lanceolatum (L.) Hill. One mile east of Russellville in a pasture, Sept., 1910.
- Cirsium muticum Mx. Three miles north of Noblesville in muck and peat, Hamilton Co., Sept. 8, 1912.
- Coreopsis tripteris L. Half a mile west of Goldsmith on right of way of L. E. & W. RR., Tipton Co., Aug. 18, 1912.
- Dyssodia papposa (Vent.) Hitch. East of Noblesville along roadside. Hamilton Co., Sept. 8, 1912.
- Eclipta alba (L.) Hassk. Two miles east of Carpentersville on Big Walnut Creek, moist rocky bank, Aug. 16, 1911.
- Erechtites hieracifolia (L.) Raf. One mile east of Russellville in rich woods, Sept. 1, 1910.
- Erigeron annuus (L.) Pers. Near Russellville in timothy field, July, 1910.
- Erigeron canadensis L. Near Russellville in field, Sept. 1, 1910.
- Erigeron philadelphicus L. Five miles south of Russellville in open hillside, June 12, 1910.
- Erigeron ramosus (Walt.) B. S. P. Near Russellville in field, July 17, 1910.
- Eupatorium altissimum L. Russellville, Sept., 1910.
- Eupatorium coelestinum L. Rocky shore of Mill Creek, Aug. 9, 1911. Washington Township.
- Eupatorium perfoliatum L. One mile east of Russellville on low damp ground, Sept., 1910.

- Eupatorium serotinum Mx. Near Russellville on rich hillside, Sept., 1910.
- Eupatorium urticaefolium Reichard. South of Russellville on rich hillside, Aug. 21, 1910.
- Galinsoga parviflora, var. hispida DC. In Russellville, Apr. 20, 1911.
  Gnaphalium polycephalium Mx. Three miles south of Russellville on dry hillside, Aug. 28, 1910.
- Helenium autumnale L. Near Russellville along a stream, Sept. 1, 1910.
   Helianthus decapetalus L. Five miles south of Russellville on edge of woods, Sept. 4, 1910.
- Helianthus grosseserratus Martens. West of Goldsmith along L. E. & W. RR., on Miami silt, Aug. 18, 1912.
- Helianthus microcephalus T. & G. South of Russellville on dry hillsides, Aug., 1910, and Sept., 1911.
- Helianthus mollis Lam. On right of way of Monon RR., west of Greencastle, Aug. 27, 1911. West of Kempton on right of way of L. E. & W. RR., Tipton Co., Aug. 18, 1912. Six miles east of Knox on edge of wood, Starke Co., Aug. 25, 1915.
- Helianthus strumosus, var. mollis T. & G. One mile west of Goldsmith on L. E. & W. RR. tracks, Tipton Co., Aug. 18, 1912.
- Helianthus tuberosus L. South of Russellville along Raccoon Creek, Sept. 4, 1910.
- Heliopsis helianthoides (L.) Sweet. South of Russellville along Raccoon Creek, Aug. 21, 1910.
- Hieracium paniculatum L. Five miles south of Russellville on dry hillside, Sept. 4, 1910.
- Hieracium scabrum Mx. One mile north of Ferndale in dry woods, Sept. 11, 1911, Parke Co.
- Inula helenium L. Two miles south of Russellville along roadside, July 9, 1910.
- Krigia amplexicaulis Nutt. Happy Hollow northwest of LaFayette on dry wooded hillside, June 4, 1914.
- Krigia virginica (L.) Willd. Seven miles east of Knox on sandhill along roadside, Starke Co., Aug. 25, 1915.
- Kuhnia eupatorioides L. North of Greencastle on bank of Monon RR., Aug. 27, 1911.
- Lactuca canadensis L. One mile east of Russellville in moist grounds, July, 1910 and Sept., 1910.
- Lactuca scariola L. Near Russellville along roadsides, Aug. 26, 1911.
  Lactuca spicata (Lam.) Hitchc. Six miles south of Russellville in rich woods, Oct. 16, 1910.
- Lactuca villosa Jacq. Five miles south of Russellville along roadside, rich soil, Sept. 4, 1910.
- Lepachys pinnata (Vent.) T. & G. West of Goldsmith on bank of L. E. & W. RR., Tipton Co., July 14, 1912.
- Liatris cylindracea Mx. Two miles south of Hamlet, on sandhill along roadside, Starke Co., July 26, 1915.
- Liatris scariosa Willd. In sand at edge of Mud Lake, Sept. 17, 1915.
  Liatris spicata (L.) Willd. Near Goldsmith in moist soil, Tipton Co.,
  July 14, 1912.

- Parthenium integrifolium L. West of Kempton on dry knoll along L. E.& W. RR., Tipton Co., Aug. 18, 1912.
- Polymnia canadensis L. On old Wabash-Erie Canal bank, Parke Co.,
  Aug., 1910. Near Fern on rocky hillside along Walnut Creek, Aug.
  8, 1911. Five miles south of Russellville, July, 1915.
- Prenanthes alba L. "The Shades" on moist shaly hillside, Montgomery Co., Sept. 15, 1910.
- Prenanthes altissima L. Four miles south of Russellville on edge of woods, Sept. 4, 1910.
- Prenanthes altissima, var. cinnamomea Fern. Six miles south of Russellville in rich woods, Oct. 16, 1910.
- Prenanthes crepidinea Mx. Five miles south of Russellville in rich low ground, Sept. 4, 1910. One mile north of Russellville in rich woods, Oct. 2, 1910.
- Prenanthes racemosa Mx. West of Goldsmith along L. E. & W. RR., in low ground, rare, Tipton Co., Aug. 18, 1912.
- Rudbeckia hirta L. Two miles east of Waveland in a field, Montgomery Co., July 4, 1910.
- Rudbeckia laciniana L. South of Russellville along Raccoon Creek, Aug. 1910.
- Rudbeckia subtomentosa Pursh. One mile west of Goldsmith on silt, Tipton Co., July 14, 1912.
- Rudbeckia triloba L. South of Russellville along Raccoon Creek, July, 1910.
- Senecio aureus L. Three miles south of Russellville in a swamp, May, 1910.
- Senecio obovatus Muhl. Four miles east of Russellville on wooded hillside, May 1, 1910. Three miles south, April, 1911.
- Silphium asteriscus L., var. laevicaule DC. Two miles west of Crawfordsville along Big Four RR., Montgomery Co., Aug. 10, 1910.
- Silphium laciniatum L. West of Goldsmith along L. E. & W. RR., July, 1912.
- Silphium perfoliatum L. South of Russellville along Raccoon Creek, Aug., 1910.
- Solidago caesia L. Three miles south of Russellville in rich woods, Sept. 18, 1910.
- Solidago canadensis L. Five miles south of Russellville, Sept., 1910.
- Solidago graminifolia (L.) Salisb. South of Russellville in poor soil on edge of fields, Sept. 17, 1911.
- Solidago juncea Ait. "The Shades" on rocky hillside along Indian Creek,
  Montgomery Co., July 4, 1910. West of Goldsmith along L. E. &
  W. RR., Tipton Co., July 17, 1915. Three miles north of Noblesville, Sept. 8, 1915.
- Solidago latifolia L. Three miles south of Russellville along Raccoon Creek, Sept. 18, 1910.
- Solidago patula Muhl. Three miles south of Russellville in a swamp, Sept. 18, 1910.
- Solidago rigida L. West of Goldsmith along L. E. & W. RR., Tipton Co., Aug. 3, 1915.

Solidago serotina Ait. Three miles south of Russellville, Sept. 3, 1911. Low damp ground east of Raccoon along C. H. & D. RR., Sept. 10, 1911.

Solidago ulmifolia Muhl. South of Russellville on rich wooded hill, Sept. 4, 1910, and Oct., 1911.

Sonchus oleraceus L. Weed in Crawfordsville, Sept., 1910.

Tanacetum vulgare L. Roadside in Russellville, Sept. 1, 1910.

Taraxicum officinale Weber. Weed in Greencastle, Oct. 5, 1911.

Tragopogon pratensis L. On embankment of L. E. & W. RR., in Kempton, Tipton Co., July 14, 1912.

Vernonia altissima Nutt. One mile east of Russellville in pasture, Sept. 1, 1910.

Vernonia fasciculata Mx. One mile south of Kempton, Tipton Co., July, 1912. Three miles west of Knox in a meadow, Starke Co., Aug., 1915. Ferndale, Sept. 11, 1910.

Vernonia missurica Raf. Half a mile north of Ferndale along a limestone ledge near a stream, Parke Co., Sept. 11, 1910.