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FLORA OF SOUTHERN IOWA.

T. J. AND M. F. L. FITZPATRICK.

The following notes are based upon collections in our private herbarium. In point of time the period reaches from 1882 to 1897. The counties represented being Decatur, Appanoose, Wapello, Van Buren, Shelby, and Johnson, extended by occasional collections from neighboring counties.

The sedges were determined by R. I. Cratty, the grasses by F. Lamson Scribner, and miscellaneous species by the officers of the Missouri Botanical garden.

To those who wish to obtain a more thorough knowledge of the flora of southern Iowa we submit our results, hoping they are worthy of consideration.

RANUNCULACEÆ,

Clematis virginiana L. Decatur, Appanoose, Des Moines, and Johnson Cos. Fence rows, along streams, frequent.

C. pitcheri T. & G. Decatur, Shelby, and Johnson Cos. Rich woods, frequent.

Anemone patens nuttalliana Gray. Crawford and Shelby Cos. High prairies, common.

A. cylindrica Gray. Decatur and Johnson Cos. Prairies and open woods, frequent.

A. virginiana L. Decatur, Appanoose, Des Moines, and Johnson Cos. Woods, frequent.

A. pennsylvanica L. Des Moines and Johnson Cos.

A. nemorosa L. Johnson Co. Upland woods, common.

Hepatica acutiloba DC. Johnson and Decatur Cos. Upland woods, common.

Anemonella thalictroides Spach. Decatur and Johnson Cos. Upland woods, frequent.

Thalictrum purpurascens L. Decatur, Appanoose, Des Moines, Shelby, and Johnson Cos. Rich woods, frequent.

- Ranunculus circinatus* Sibth. Johnson Co. Ponds frequent.
R. abortivus L. Decatur, Page, Shelby, and Johnson Cos.
 Low grounds, common.
R. recurvatus Poir. Johnson Co. Woods, frequent.
R. fasciularis Muhl. Johnson Co. Wooded hillsides, common.
R. septentrionalis Poir. Decatur, Shelby, and Johnson Cos.
 Low grounds, common
R. repens L. Johnson Co. Upland woods, frequent.
R. acris L. Page Co.
Isopyrum biternatum T. & G. Decatur and Johnson Cos.
 Woods, frequent.
Caltha palustris L. Johnson Co. Wet places, infrequent.
Aquilegia canadensis L. Page, Decatur, Shelby, and Johnson
 Cos. Woods, common.
Delphinium tricorne Mx. Decatur and Shelby Cos. Rich soil,
 fields and woods, common.
D. azureum Mx. Page, Decatur, and Shelby Cos. Prairies,
 common.
D. ajacis L. Johnson Co. Occasionally an escape.
Actæa spicata rubra Ait. Shelby and Johnson Cos. Woods,
 infrequent.
A. alba Bigel. Decatur and Johnson Cos. Woods, common.

MENISPERMACEÆ.

- Menispermum canadense* L. Decatur, Shelby, and Johnson
 Cos. Woods, frequent.

BERBERIDACEÆ.

- Caulophyllum thalictroides* Mx. Decatur, Shelby, and Johnson
 Cos. Woods, frequent.
Podophyllum peltatum L. Page, Decatur, Appanoose, and
 Johnson Cos. Rich upland woods, common.

NYMPHÆACEÆ.

- Nymphaea odorata* Ait. Johnson Co. Ponds, frequent.
Nuphar advena Ait. Johnson Co. Margins of ponds, fre-
 quent.

PAPAVERACEÆ.

Sanguinaria canadensis L. Decatur, Appanoose, Shelby, and Johnson Cos. Rich woods, common.

Argemone mexicana L. Johnson Co. Rarely an escape.

FUMARIACEÆ.

Dicentra cucullaria DC. Decatur, Appanoose, Shelby, Page, and Johnson Cos. Rich woods, common.

Corydalis curvisiliqua Englm. Page and Henry Cos. Probably not frequent. Has been labeled *C. aurea* Willd, and also the variety *occidentalis* Englm.

CRUCIFERÆ.

Dentaria laciniata Muhl. Decatur, Shelby, and Johnson Cos. Rich woods, frequent.

Cardamine rhomboidea DC. Decatur, Shelby, and Johnson Cos. Wet grounds, common.

C. rhomboidea purpurea. Johnson Co.

C. hirsuta L. Decatur and Johnson Cos. Wet soil, frequent.

Arabis dentata T. & G. Henry Co.

A. canadensis L. Decatur Co. Woods, infrequent.

A. confinis Watson. Johnson Co. Woods, common.

Draba caroliniana Walt. Johnson Co. Rocky banks, frequent.

Nasturtium palustre DC. Decatur, Van Buren, Shelby, and Johnson Cos. Wet places, common,

N. obtusum Nutt. Decatur Co. In fields, infrequent.

N. armoracia Fries. Page, Decatur, Shelby, and Johnson Cos. Near dwellings, frequent.

N. sessiliflorum Nutt. Van Buren Co. Frequent along Des Moines river.

Barbarea vulgaris R. Br. Shelby Co. Cultivated fields, infrequent.

Erysimum cheiranthoides L. Johnson Co. Banks, common.

Sisymbrium canescens Nutt. Decatur, Page, and Johnson Cos. Woods, frequent.

S. officinale Scop. Decatur, Shelby, and Johnson Cos. Waste places, common.

Brassica sinapistrum Boiss. Decatur and Johnson Cos. Waste places, infrequent.

B. nigra Koch. Decatur, Appanoose, Johnson, Shelby, and Van Buren Cos. Fields and waste places, common.

B. alba Boiss. Decatur Co. Forms were found with bristly pods. This character, however, varies and the specimens may be the preceding species.

Capsella bursa-pastoris Moench. Page, Decatur, Van Buren, Shelby, and Johnson Cos. Waste grounds, common.

Lepidium virginicum L. Johnson Co. Waste ground, frequent.

L. intermedium Gray. Decatur, Appanoose, and Shelby Cos. Waste places, common.

Raphanus sativus L. Decatur Co. Occasionally an escape.

CAPPARIDACEÆ.

Polanisia trachysperma T. & G. Des Moines and Johnson Cos. Sandy shores, frequent. Usually mistaken for *P. graveolens* Raf.

CISTACEÆ.

Helianthemum canadense Mx. Decatur, Appanoose, Shelby, and Johnson Cos. Prairies, frequent.

Lechea major Mx. Decatur, Appanoose, and Johnson Cos. Borders of woods, frequent.

L. minor L. Johnson Co. Dry soil, frequent.

L. tenuifolia Mx. Van Buren Co. Dry soil, frequent.

VIOLACEÆ.

Viola pedata L. Decatur and Johnson Cos. Open woods, frequent.

V. pedatifida G. Don. Decatur, Shelby, Page, and Johnson Cos. Woods and fields, common, especially southward.

V. palmata L. Decatur and Appanoose Cos. Damp soil, fields and woods, common.

V. palmata cucullata Gray. Decatur, Wapello, Van Buren, Des Moines, Shelby, Page, and Johnson Cos. Fields and woods, common.

V. sagittata Ait. Johnson Co. Woods, frequent locally.

V. pubescens Ait. Decatur, Shelby, and Johnson Cos. Rich woods, frequent.

CARYOPHYLLACEÆ.

- Dianthus armeria* L. Johnson Co. Upland woods, frequent.
Saponaria officinalis L. Decatur, Des Moines, and Johnson Cos. Waste places, frequent.
S. vaccaria L. Johnson Co. Waste places, infrequent.
Silene stellata Ait. Decatur, Appanoose, Van Buren, Des Moines, and Johnson Cos. Rich woods, frequent.
S. nivea Otth. Johnson Co. Along streams, infrequent,
S. antirrhina L. Decatur, Henry, and Johnson Cos. Fields and waste places, frequent.
Lychnis githago Lam. Johnson Co. Waste places, infrequent.
Arenaria lateriflora L. Johnson Co. Low places, frequent.
Stellaria media Smith. Henry Co.
S. longifolia Muhl. Johnson Co. Wet woods, infrequent.
Cerastium nutans Raf. Decatur and Johnson Cos. Wet places, frequent.

PORTULACACEÆ.

- Portulaca oleracea* L. Decatur, Appanoose, Wapello, Van Buren, Des Moines, and Johnson Cos. Fields and waste places, common.
Claytonia virginica L. Decatur, Van Buren, Des Moines, and Johnson Cos. Rich woods, common.

HYPERICACEÆ.

- Hypericum ascyron* L. Johnson Co. Prairie, rare.
H. prolificum L. Appanoose, Des Moines, and Jefferson Cos. Waysides, infrequent.
H. mutilum L. Decatur Co. Open woods, common.
H. cistifolium Lam. Appanoose and Johnson Cos. Waste places, infrequent.
H. maculatum Walt. Decatur, Appanoose, Van Buren, and Johnson Cos. Open woods, frequent.
H. canadense L. Decatur and Johnson Cos.

MALVACEÆ.

- Malva rotundifolia* L. Decatur, Van Buren, and Johnson Cos. Waste places, frequent.

M. sylvestris L. Shelby and Johnson Cos. Waste places, infrequent.

Callirrhoe involucrata Gray. Shelby Co. Open woods, common locality.

Sida spinosa L. Decatur, Van Buren, Henry, and Des Moines Cos. Waste places, frequent.

Abutilon avicennæ Gaertn. Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Fields and waste places, common.

Hibiscus militaris Cav. Johnson Co. Borders of ponds, frequent.

H. trionum L. Decatur, Appanoose, Van Buren, and Wapello Cos. Waste ground, frequent.

TILIACEÆ.

Tilia americana L. Decatur, Appanoose, Van Buren, Des Moines, Shelby, and Johnson Cos. Rich soil, frequent.

LINACEÆ.

Linum sulcatum Riddell. Decatur, Appanoose, and Van Buren Cos. Prairies, frequent.

L. usitatissimum L. Decatur, Wayne, Des Moines, and Johnson Cos. Waste places, frequent.

GERANIACEÆ.

Geranium maculatum L. Decatur and Johnson Cos. Rich woods, common.

G. carolinianum L. Johnson Co. Frequent locally.

Oxalis violacea L. Page, Decatur, Des Moines, Shelby, and Johnson Cos. Fields, common.

O. corniculata stricta Sav. Page, Decatur, Appanoose, Wapello, Van Buren, Des Moines, and Johnson Cos. Woods and waste places, common.

Impatiens pallida Nutt. Decatur, Appanoose, Des Moines, and Johnson Cos. Wet woods, frequent.

I. fulva Nutt. Decatur, Appanoose, Van Buren, Des Moines, and Johnson Cos. With the preceding, less frequent.

RUTACEÆ.

Xanthoxylum americanum Mill. Decatur, Shelby, and Johnson Cos. Woods, common.

CELASTRACEÆ.

Celastrus scandens L. Decatur and Johnson Cos. Rich woods, frequent.

Euonymus atropurpureus Jacq. Decatur, Van Buren, and Johnson Cos. Woods, frequent.

RHAMNACEÆ.

Rhamnus lanceolata Pursh. Decatur, Des Moines, and Johnson Cos. Borders of fields and woods, frequent.

Ceanothus americanus L. Decatur, Appanoose, Van Buren, Des Moines, Shelby, and Johnson Cos. Open woods and prairies, common in Johnson Co., but infrequent southward.

C. ovatus Desf. Decatur and Shelby Cos. Prairies, common.

VITACEÆ.

Vitis riparia Mx. Decatur, Shelby, and Johnson Cos. Low woods, common.

V. cinerea Englm. Decatur Co. Infrequent.

Ampelopsis quinquefolia Mx. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Woods, frequent.

SAPINDACEÆ.

Æsculus glabra Willd. Decatur, Appanoose, and Van Buren Cos. Rich woods, common.

Acer saccharinum Wang. Decatur, Van Buren, Des Moines, and Johnson Cos. Along rivers, frequent.

A. dasycarpum Ehrh. Decatur, Appanoose, Wapello, Shelby, and Johnson Cos. Along rivers, common.

Negundo aceroides Moench. Page, Decatur, Appanoose, Wapello, Shelby, and Johnson Cos. Low woods, common.

Staphylea trifolia L. Johnson and Decatur Cos. Bluffs, frequent. In Missouri opposite Decatur Co., Iowa.

ANACARDIACEÆ.

Rhus glabra L. Decatur, Wapello, Van Buren, Des Moines, and Johnson Cos. Woods and uplands, common.

R. toxicodendron L. Decatur, Wapello, Van Buren, Des Moines, Shelby, and Johnson Cos. Waysides and woods, frequent.

R. canadensis Marsh. Wapello, Henry, Van Buren, and Jefferson Cos. Rocky woods, frequent. Also found near Decatur Co. line, in Missouri.

POLYGALACEÆ.

Polygala senega L. Johnson Co. Woods, common.

P. sanguinea L. Decatur, Appanoose, and Johnson Cos. Fields, common.

P. verticillata ambigua Gray. Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Fields and open woods, frequent.

LEGUMINOSÆ.

Baptisia leucantha T. & G. Decatur, Appanoose, Wapello, Des Moines, Shelby, and Johnson Cos. Fields and open woods, common.

B. leucophœa Nutt. Page, Decatur, Appanoose, Shelby, and Johnson Cos. Open woods, common.

Crotalaria sagittalis L. Johnson Co. Sandy soil, open woods, frequent.

Trifolium pratense L. Page, Decatur, Appanoose, Van Buren, Wapello, Shelby, and Johnson Cos. Cultivated and in waste places, common.

T. reflexum L. Johnson Co. Sandy banks, infrequent.

T. repens L. Page, Decatur, Appanoose, Wapello, Van Buren, Shelby, and Johnson Cos. Pastures and waysides, common.

T. hybridum L. Decatur, Shelby, and Johnson Cos. Fields and waste places, frequent.

Melilotus officinalis Willd. Decatur and Johnson Cos. Waste places, infrequent.

M. alba Lam. Decatur, Wapello, Des Moines, and Johnson Cos. Waste places, common.

Medicago sativa L. Decatur Co. Vacant lots, frequent.

Psoralea tenuiflora Pursh. Prairie, common. Decatur Co.

P. argophylla Pursh. Prairies, infrequent. Shelby Co.

P. esculenta Pursh. Prairies, frequent. Shelby Co.

Amorpha canescens Nutt. Decatur, Appanoose, Wapello, Van Buren, Shelby, and Johnson Cos. Dry soil, open woods and waysides, common.

A. fruticosa L. Decatur, Appanoose, Wapello, Shelby, and Johnson Cos. Along water courses, common.

Dulea alopecuroides Willd. Decatur and Johnson Cos. Waysides and waste places, frequent.

Petalostemon violaceus Mx. Decatur, Appanoose and Johnson Cos. Prairies, frequent.

P. candidus Mx. Decatur, Appanoose, Wapello, Shelby and Johnson Cos. Prairies, frequent.

Tephrosia virginiana Pers. Johnson Co. Sandy woods, infrequent.

Robinia pseudacacia L. Decatur, Wapello, Des Moines, Shelby, and Johnson Cos. Waste places, frequent.

Astragalus caryocarpus Ker. Decatur and Shelby Cos. Prairies, frequent.

A. canadensis L. Decatur, Appanoose, Van Buren, Des Moines, and Johnson Cos. Rich soil, common.

Glycyrrhiza lepidota Nutt. Decatur Co. Waysides, rare.

Desmodium acuminatum DC. Decatur, Appanoose, and Johnson Cos. Rich woods, common.

D. illinoense Gray. Decatur Co. Prairies, frequent.

D. paniculatum DC. Van Buren and Johnson Cos. Woods, infrequent.

D. canadense DC. Decatur, Appanoose, Van Buren, and Johnson Cos. Open woods, frequent.

D. dillenii Darlingt. Johnson Co. Woods, infrequent.

Lespedeza violacea Pers. Decatur, Appanoose, Van Buren and Johnson Cos. Open woods, frequent.

L. capitata Mx. Decatur, Appanoose, and Johnson Cos. Prairies and rocky banks, frequent.

Vicia americana Muhl. Shelby Co. Low prairies, frequent.

Lathyrus palustris L. Page and Johnson Cos. Dry woods, infrequent.

Apios tuberosa Moench. Decatur and Johnson Cos. Rich woods and banks, frequent.

Strophostyles angulosa Ell. Decatur, Appanoose, Van Buren, and Johnson Cos. Sandy soil, frequent.

S. pauciflorus Watson. Wapello Co. Sandy ground, frequent.

Amphicarpæa monoica Nutt. Decatur and Johnson Cos. Dry soil, frequent.

A. pitcheri T. & G. Decatur, Van Buren, and Johnson Cos. Woods, common.

Cercis canadensis L. Decatur, Appanoose, Van Buren, Des Moines, Jefferson, and Henry Cos. Wooded bluffs, frequent.

Cassia marylandica L. Ringgold and Appanoose Cos. Rich woods, infrequent. Found in Missouri, opposite Decatur Co.

C. chamæcrista L. Decatur, Appanoose, Wapello, and Johnson Cos. Fields and waysides, common.

Gymnocladus canadensis Lam. Decatur and Johnson Cos. Rich woods, infrequent.

Gleditschia triacanthos L. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Rich woods, common.

ROSACEÆ.

Prunus americana Marsh. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Thickets, common.

P. serotina Ehrh. Decatur, Appanoose, Shelby, and Johnson Cos. Woods, frequent.

P. virginiana L. Decatur, Shelby, Page, and Johnson Cos. Low woods, frequent.

Spiræa salicifolia L.; Henry and Johnson Cos. Rocky woods, frequent.

Physocarpus opulifolius Maxim. Decatur and Johnson Cos. Rocky woods, frequent.

Rubus occidentalis L. Page, Decatur, Appanoose, Van Buren, Shelby and Johnson Cos. Woods and fence rows, frequent.

R. villosus Ait. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Woods, common.

P. canadensis L. Decatur and Appanoose Cos. Poor soil, fields, common.

Geum album Gmelin. Decatur, Appanoose, and Johnson Cos. Open woods, frequent.

G. virginianum L. Decatur Co. Low grounds, infrequent.

Fragaria virginiana Mill. Decatur, Shelby, and Johnson Cos. Fields and woods, common.

F. vesca L. Shelby, Page, and Johnson Cos. Woods, infrequent.

Potentilla arguta Pursh. Decatur, Appanoose, Shelby, and Johnson Cos. Prairies, common.

P. norvegica L. Decatur, Shelby, and Johnson Cos. Fields, common.

P. canadensis L. Decatur and Johnson Cos. Waysides and open woods, common.

Agrimonia eupatoria L. Decatur, Appanoose, Van Buren, and Johnson Cos. Woods, common.

A. parviflora Ait. Decatur Co. Low grounds, prairies and woods.

Rosa arkansana Porter. Decatur, Appanoose, Shelby, and Johnson Cos. Prairies and woods, common.

R. humilis Marsh. Johnson Co.

R. blanda Ait. Johnson Co. Woods, frequent.

Pyrus coronaria L. Decatur, Appanoose, Shelby, and Johnson Cos. Thickets, common.

P. malus L. Decatur and Appanoose Cos. Fields and waste places, not infrequent.

Cratægus coccinea L. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Woods, common.

C. tomentosa L. Page, Decatur, Appanoose, Shelby, and Johnson Cos. Woods, frequent.

C. crus-galli L. Decatur, Wapello, and Johnson Cos. Woods, frequent.

Amelanchier canadensis T. & G. Decatur and Johnson Cos. Bluffs, common.

SAXIFRAGACEÆ.

Saxifraga pennsylvanica L. Johnson Co. Low prairies, common.

Mitella diphylla L. Johnson Co. Woods, common.

Heuchera hispida Pursh. Decatur, Appanoose, and Johnson Cos. Prairies, common.

Ribes cynosbati L. Johnson Co. Woods, common.

R. gracile Mx. Page, Decatur, Appanoose, Shelby, and Johnson Cos. Low grounds, common.

S. floridum L'Her. Johnson Co. Woods, infrequent.

CRASSULACEÆ.

Penthorum sedoides L. Decatur, Appanoose, Van Buren, and Johnson Cos. Wet ground, common.

Sedum telephium L. Decatur and Johnson Cos. Occasionally an escape.

HALORAGÆÆ.

Myriophyllum scabratum Mx. Appanoose Co. In shallow water, common.

LYTHRACEÆ.

Lythrum alatum Pursh. Decatur, Appanoose, and Johnson Cos. Fields and low places, common.

Rotala ramosior Koehne. Henry Co.

Ammannia coccinea Rottb. Johnson Co. Sandy shores, infrequent.

ONAGRACEÆ.

Ludwigia alternifolia L. Decatur and Johnson Cos. Wet ground, infrequent.

L. polycarpa Short & Peter. Decatur and Appanoose Cos. Margins of ponds, common.

L. palustris Ell. Johnson Co. In water or wet places, infrequent.

Epilobium angustifolium L. Shelby Co. Woods, infrequent.

E. coloratum Muhl. Decatur, Van Buren, and Johnson Cos. Wet ground along rivers, frequent.

Gaura coccinea Nutt. Decatur, Appanoose, and Johnson Cos. Fields and waste places, common.

Oenothera biennis L. Van Buren and Johnson Cos. Waste ground, frequent.

Oe. rhombipetala Nutt. Decatur, Van Buren, Des Moines, and Johnson Cos. Fields and waste places, common.

Oe. serrulata Nutt. Shelby Co. Prairies, frequent.

Circœa lutetiana L. Decatur, Appanoose, Henry, and Johnson Cos. Woods, common.

CUCURBITACEÆ.

Sicyos angulata L. Des Moines Co. Waste places, frequent.

Echinocystis lobata T. & G. Decatur, Des Moines, Shelby, and Johnson Cos. Low woods, common.

FICOIDEÆ.

Mollugo verticillata L. Decatur and Johnson Cos. Sandy shores, frequent.

UMBELLIFERÆ.

Daucus carota L. Decatur and Appanoose Cos. Fields infrequent.

Tiedemannia rigida Coult. & Rose. Decatur Co. Wet sloughs, frequent; often on high prairies.

Heracleum lanatum Mx. Decatur and Shelby Cos. Rich woods, common.

Cicuta maculata L. Decatur, Appanoose, Van Buren, and Johnson Cos. Wet places, common.

Thaspium barbinode Nutt. Des Moines and Johnson Cos. Woods, frequent.

Pimpiella integerrima Benth & Hook. Decatur, Appanoose, and Johnson Cos. Woods, frequent.

Polytaenium nuttallii DC. Decatur and Appanoose Cos. Dry woods, infrequent.

Cryptotaenia canadensis DC. Decatur, Appanoose, Shelby, and Johnson Cos. Rich woods, common.

Sium cicutaefolium Gmelin. Decatur and Des Moines Cos. Shallow ponds, frequent.

Foeniculum officinale All. Johnson Co. Occasionally an escape.

Zizia aurea Koch. Decatur and Shelby Cos. Low grounds, common.

Chærophylum procumbens Crantz. Decatur, Henry, and Johnson Cos. Low woods, frequent.

Osmorrhiza longistylis DC. Decatur, Shelby, and Johnson Cos. Rich woods, frequent.

O. brevistylis DC. Decatur, Appanoose, Shelby, and Johnson Cos. Rich woods, frequent.

Eryngium yuccaefolium Mx. Decatur, Appanoose, Shelby, and Johnson Cos. Prairies, common.

Sanicula marylandica L. Decatur, Shelby, and Johnson Cos. Woods, common.

S. marylandica canadensis Torr. Appanoose and Johnson Cos. Woods, frequent.

ARALIACEÆ.

Aralia racemosa L. Van Buren, Des Moines, and Johnson Cos. Woods, frequent.

A. nudicaulis L. Johnson Co. Woods, frequent.

A. quinquefolia Decs. & Planch. Johnson Co. Woods, frequent. Seems to prefer the north hill sides.

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CORNACEÆ.

Cornus paniculata L'Her. Decatur, Appanoose, Wapello, Van Buren, Des Moines, Shelby, and Johnson Cos. Low grounds, common.

C. sericea L. Decatur, Appanoose, Shelby, and Johnson Cos. Low woods, frequent

CAPRIFOLIACEÆ.

Sambucus canadensis L. Decatur, Appanoose, Van Buren, Des Moines, Shelby, and Johnson Cos. Rich woods and fields, common.

Viburnum lentago L. Shelby, Appanoose, and Johnson Cos. Woods, frequent.

Triosteum perfoliatum L. Decatur, Appanoose, Shelby and Johnson Cos. Open woods, common.

Symphoricarpus vulgaris Mx. Decatur, Appanoose, Wapello, Van Buren, and Shelby Cos. Prairies and woods, common.

S. occidentalis Hook. Shelby Co. Open woods, frequent.

Lonicera sullivantii Gray. Johnson Co. Woods, frequent.

RUBIACEÆ.

Houstonia minima Beck. Johnson Co

H. angustifolia Mx. Shelby Co. Sandy prairie soil, frequent.

Cephalanthus occidentalis L. Decatur, Appanoose, and Johnson Cos. Wet low woods, frequent.

Galium aparine L. Decatur, Shelby, and Johnson Cos. Woods, common.

G. trifidum Decatur Co. Woods, frequent.

G. trifidum latifolium Torr. Johnson Co.

G. concinnum T. & G. Decatur, Appanoose, and Johnson Cos. Woods, common.

G. triflorum Mx. Decatur and Johnson Cos. Rich woods, common.

G. circeæans Mx. Decatur and Van Buren Cos. Woods, frequent.

COMPOSITÆ.

Vernonia fasciculata Mx. Decatur, Wapello, Van Buren, and Johnson Cos. Low grounds, common.

V. noveboracensis latifolia Gray. Decatur, Appanoose, and Van Buren Cos. Borders and open woods, common.

Eupatorium purpureum L. Decatur, Appanoose, and Johnson Cos. Woods and low pastures, common.

E. ageratooides L. Decatur, Appanoose, Van Buren, and Johnson Cos. Woods, common.

E. perfoliatum L. Decatur, Wapello, Van Buren, and Johnson Cos. Open woods, common.

E. altissimum L. Decatur and Johnson Cos. Upland woods, or prairies, infrequent.

Kuhnia eupatorioides L. Decatur and Johnson Cos. Dry soil,

Liatris scariosa Willd. Decatur and Johnson Cos. Prairies, common.

L. pycnostachya Mx. Decatur, Appanoose, and Johnson Cos. Prairies, common.

L. squarrosa Willd. Decatur and Wapello Cos. Prairies, common.

Grindelia squarrosa Dunal. Henry Co. Waste places, infrequent.

Solidago rigida L. Decatur and Johnson Cos. Prairies, common.

S. ulmifolia Muhl. Decatur and Johnson Cos. Woods, frequent.

S. latifolia L. Decatur and Johnson Cos. Woods, frequent.

S. speciosa Nutt. Decatur and Johnson Cos. Prairies, common.

S. serotina Ait. Decatur, Henry, and Johnson Cos. Borders of woods, frequent.

S. canadensis L. Decatur, Henry, and Johnson Cos. Open woods and borders of fields, common.

S. nemoralis Ait. Decatur and Johnson Cos. Prairies, common.

S. lanceolata L. Decatur, Henry, and Johnson Cos. Sandy soil, common.

Boltonia asteroides L'Her. Decatur and Johnson Cos. Wet ground, frequent.

Aster sericeus Vent. Decatur and Johnson Cos. Prairies, common.

A. shortii Hook. Johnson Co. Woods, infrequent.

A. oblongifolius Nutt. Johnson Co. Dry soil, infrequent.

A. multiflorus Ait. Decatur, Henry, and Johnson Cos. Prairies and waysides, common.

A. novæ-angliæ L. Decatur and Johnson Cos. Woods, frequent.

A. prenanthoides Muhl. Johnson Co. Woods, frequent.

A. salicifolius Ait. Decatur, Henry, and Johnson Cos. Copses, open places, frequent.

A. azureus Lindl. Decatur, Appanoose, and Johnson Cos. Woods and prairies, common.

A. cordifolius L. Decatur and Johnson Cos. Woods, infrequent.

A. sagittifolius Willd. Johnson and Decatur Cos. Woods frequent.

A. lævis L. Decatur Co. Woods, open places, common.

A. diffusus Ait. Decatur Co. Low woods, common.

Erigeron bellidifolius Muhl. Johnson Co. Woods, infrequent.

E. strigosus Muhl. Shelby and Johnson Cos. Fields and waste places, common.

E. philadelphicus L. Decatur, Shelby, and Johnson Cos. Rich woods, frequent.

E. divaricatus Mx. Decatur, Appanoose, and Johnson Cos. Dry soil, pastures, common.

E. canadense L. Decatur and Appanoose Cos. Waste places, common.

E. annuus Pers. Appanoose, Shelby, and Johnson Cos. Waste places, common.

Antennaria plantaginifolia Hook. Decatur, Appanoose, Shelby, Page, and Johnson Cos. Meadows and upland woods, common.

Anaphalis margaritacea Benth. & Hook. Decatur and Johnson Cos. Dry woods, frequent.

Inula helenium L. Johnson Co. Open woods, frequent locally.

Polymnia canadensis L. Des Moines Co. Along cliffs, frequent.

Silphium perfoliatum L. Decatur, Van Buren, Des Moines, Shelby, and Johnson Cos. Low grounds, frequent.

S. integrifolium Mx. Decatur, Appanoose, Van Buren, and Johnson Cos. Prairies and open woods, frequent.

S. laciniatum L. Decatur, Appanoose, and Johnson Cos. Prairies, common.

Parthenium integrifolium L. Decatur, Appanoose, and Johnson Cos. Prairies, common.

Ambrosia artemisefolia L. Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Waste places, very common.

A. trifida L. Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Waste ground, common.

A. trifida integrifolia T. & G. Decatur and Johnson Cos. Waste places, frequent.

A. psilostachya DC. Decatur and Johnson Cos. Waste places, frequent.

Xanthium canadense Mill. Decatur, Appanoose, Wapello, and Johnson Cos. Fields and waste places, common.

Eclipta alba Hassk. Johnson Co. Along river banks, infrequent.

Heliopsis scabra Dunal. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Prairies, common.

Echinacea purpurea Moench. Decatur and Appanoose Cos. Woods, infrequent.

E. angustifolia DC. Decatur, Shelby, and Johnson Cos. Prairies, frequent.

Rudbeckia triloba L. Decatur, Wapello, Van Buren, and Johnson Cos. Open woods, common.

R. hirta L. Decatur, Appanoose, Van Buren, and Johnson Cos. Open woods and prairies, frequent.

R. laciniata L. Decatur and Johnson Cos. Low woods, common.

R. subtomentosa Pursh. Decatur Co. Prairies, infrequent.

Lepachys pinnata T. & G. Decatur, Appanoose, and Johnson Cos. Prairies, common.

Helianthus annuus L. Decatur, Appanoose, Van Buren, Des Moines, and Johnson Cos. Waste places, frequent.

H. rigidus Desf. Decatur and Johnson Cos. Prairies, frequent.

H. occidentalis Rid. Johnson Co. Prairies, frequent.

H. grosse-serratus Mart. Decatur, Appanoose, and Johnson Cos. Low grounds, common.

H. hirsutus Raf. Decatur and Van Buren Cos. Prairies, frequent.

H. strumosus L. Johnson Co. Borders and low woods, frequent.

H. tuberosus L. Decatur, Van Buren, and Henry Cos. Low woods and prairies, frequent.

Actinomeris squarrosa Nutt. Decatur, Appanoose, and Johnson Cos. Low woods, frequent.

Coreopsis palmata Nutt. Decatur, Shelby, and Johnson Cos. Prairies, common.

- C. tripteris* L. Decatur and Johnson Cos. Prairies and open woods, frequent.
- C. involucrata* Nutt. Decatur and Johnson Cos. Wet grounds, common.
- Bidens frondosa* L. Decatur, Appanoose, and Johnson Cos. Low grounds, common.
- B. connata* Muhl. Decatur and Johnson Cos. Low grounds, frequent.
- B. cernua* L. Decatur and Johnson Cos. Wet grounds, low woods, frequent.
- B. chrysanthemoides* Mx. Decatur and Johnson Cos. Low waste places, frequent.
- Helenium autumnale* L. Decatur, Appanoose, Des Moines, and Johnson Cos. River banks, moist places, frequent.
- Dysodia chrysanthemoides* Lag. Decatur, Appanoose, Wapello, Van Buren, Shelby, and Johnson Cos. Waste places, common.
- Anthemis cotula* DC. Decatur, Appanoose, Wapello, Van Buren, Des Moines, Shelby, and Johnson Cos. Waste places, common.
- Achillea millefolium* L. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Fields and waste places, common.
- Chrysanthemum leucanthemum* L. Decatur and Johnson Cos. Waste places, infrequent.
- Tanacetum vulgare* L. Decatur and Johnson Cos. Waste places near dwellings, infrequent.
- Artemisia biennis* Willd. Decatur, Appanoose, Wapello, and Johnson Cos. Waste places, frequent.
- A. ludoviciana* Nutt. Decatur and Johnson Cos. Waysides and fields, common.
- Senecio aureus* L. Johnson Co. Rich woods, infrequent.
- S. aureus balsamitæ* T. & G. Page, Decatur, Shelby, and Johnson Cos. Rich woods, common.
- Cacalia reniformis* Muhl. Johnson Co. Woods, infrequent.
- C. atriplicifolia* L. Decatur, Van Buren, and Johnson Cos. Rich woods and prairies, frequent.
- C. tuberosa* Nutt. Decatur, Appanoose, and Shelby Cos. Moist prairies, frequent.
- Erechtites hieracifolia* Raf. Decatur and Johnson Cos. Open woods, frequent.
- Arctium lappa* L. Decatur, Appanoose, Van Buren, Des Moines, and Johnson Cos. Waste places, frequent.

Cnicus lanceolatus Hoffm. Decatur, Appanoose, Van Buren, and Johnson Cos. Fields and waste places, common.

C. altissimus Willd. Decatur and Johnson Cos. Waste places, frequent.

C. altissimus discolor Gray. Johnson Co. Waste places, frequent.

C. arvensis Hoffm. Decatur and Johnson Cos. Fields and waste places, infrequent.

Krigia amplexicaulis Nutt. Johnson Co. Woods, frequent.

Hieracium canadense Mx. Johnson Co. Open woods, infrequent.

H. scabrum Mx. Decatur and Johnson Cos. Dry woods, frequent.

H. longipilum Torr. Decatur Co. Sandy prairie, infrequent.

Prenanthes aspera Mx. Decatur Co. Open woods, frequent.

P. crepidinea Mx. Johnson Co. We have one specimen.

P. alba Johnson Co. Woods, frequent.

Lygodesmia juncea Don. Shelby Co. Fields and waste places, common.

Troximon cuspidatum Pursh. Shelby and Johnson Cos. High prairies, infrequent.

Taraxacum officinale Weber. Shelby, Page, Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Pastures and waysides, common.

Lactuca scariola L. Van Buren, Henry, and Johnson Cos. Waste places, frequent.

L. canadensis L. Decatur and Johnson Cos. Waste ground, frequent.

L. acuminata Gray. Decatur, Van Buren, Des Moines, and Johnson Cos.

Sonchus asper Vill. Decatur and Johnson Cos. Waste grounds, frequent.

S. oleraceus Johnson Co. Waste grounds, frequent.

LOBELIACEÆ.

Lobelia cardinalis L. Appanoose and Johnson Cos. Wet low woods, frequent.

L. syphilitica L. Decatur and Johnson Cos. Moist soil, common.

L. spicata Lam. Decatur, Van Buren, and Johnson Cos. Fields, common.

L. inflata L. Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Open woods, frequent.

CAMPANULACEÆ.

Specularia perfoliata A. DC. Decatur and Johnson Cos. Fields and woods, frequent.

Campanula americana L. Decatur, Appanoose, Van Buren, Des Moines, and Johnson Cos. Waste places, fields, and woods, frequent.

ERICACEÆ.

Pyrola elliptica Nutt. Johnson Co. Upland woods, frequent.

Monotropa uniflora L. Johnson Co. Upland woods, common.

PRIMULACEÆ.

Dodecatheon media L. Johnson Co. Open woods, frequent.

Androscae occidentalis Pursh. Johnson Co. Rocky shores, frequent.

Steironema ciliatum Raf. Decatur, Des Moines, and Johnson Cos. Rich open woods, common.

S. lanceolatum Gray. Johnson Co. Rich soil, infrequent.

OLEACEÆ.

Fraxinus viridis Mx. Decatur, Shelby, and Johnson Cos. Woods, frequent.

F. americana L. Johnson Co. Woods, infrequent.

APOCYNACEÆ.

Apocynum androsæmifolium L. Decatur, Appanoose, Des Moines, and Johnson Cos. Fields and borders of woods, frequent.

A. cannabinum L. Decatur, Appanoose, Des Moines, Shelby, and Johnson Cos. Fields and waste places, frequent.

ASCLEPIADACEÆ.

Asclepias tuberosa L. Decatur, Appanoose, Des Moines, Shelby, and Johnson Cos. Prairies and fields, common.

- A. incarnata* L. Decatur and Johnson Cos. Wet grounds, common.
- A. purpurascens* L. Decatur and Johnson Cos. Infrequent.
- A. cornuti* DC. Decatur, Appanoose, Wapello, and Johnson Cos. Fields, common.
- A. sullivanii* Englm. Shelby Co. Infrequent.
- A. obtusifolia* Mx. Shelby and Johnson Cos. Infrequent.
- A. meadii* Torr. Decatur Co. Waysides, infrequent.
- A. phytolaccoides* Pursh Johnson Cos. Open woods, infrequent.
- A. verticillata* L. Decatur, Des Moines, and Johnson Cos. Open woods and fields, common.
- Acerates longifolia* Ell. Decatur, Appanoose, and Johnson Cos. Prairies, common
- A. viridiflora* Ell. Decatur Co. Prairies, common.

GENTIANACEÆ.

- Gentiana crinita* Froel. Johnson Co. Springy places, frequent locally.
- G. quinqueflora occidentalis* Gray. Johnson Co. Open woods, infrequent.
- G. puberula* Mx. Decatur, Jefferson, and Johnson Cos. Prairies, infrequent.
- G. andrewsii* Griseb Johnson Co. Low grounds, infrequent.
- G. alba* Muhl. Decatur Co. Open woods, infrequent.

POLEMONIACEÆ.

- Phlox paniculata* L. Johnson Co. Occasionally an escape near dwellings.
- P. pilosa* L. Decatur, Shelby, and Johnson Cos. Open woods and prairies, frequent
- P. divaricata* L, Decatur, Des Moines, Shelby, and Johnson Cos. Rich woods, common.
- P. subulata* L Page Co. Infrequent.
- Gilia linerai*s Gray. Decatur Co. Prairie, frequent.
- Polemonium reptans* L. Decatur and Johnson Cos. Rich woods, common.

HYDROPHYLLACEÆ.

Hydrophyllum virginicum L. Decatur, Shelby, and Johnson Cos. Low woods, common.

H. appendiculatum Mx. Des Moines Co. Wooded ravines, frequent.

Ellisia nyctelea L. Decatur, Shelby, and Johnson Cos. Low grounds, common.

BORRAGINACEÆ.

Cynoglossum officinale L. Des Moines Co. Waste places, infrequent.

Echinosperrnum virginicum Lehm. Decatur and Johnson Cos.

E. lappula Lehm. Wapello and Johnson Cos. Roadsides and rocky woods, frequent.

Mertensia virginicum DC. Page, Van Buren, Des Moines, and Johnson Cos. Damp woods, frequent.

Myosotis verna Nutt. Johnson Co.

Lithospermum latifolium Mx. Shelby Co. Woods, infrequent.

L. hirtum Lehm. Johnson Co. Sandy soil, frequent.

L. canescens Lehm. Page, Decatur, Shelby, and Johnson Cos. Prairies, common.

L. angustifolium Mx. Shelby Co. Prairies, common.

Onosmodium carolinianum DC. Shelby Co. Upland pastures, common. Johnson Co. Sandy soil along the Cedar river, frequent.

CONVOLVULACEÆ.

Ipomœa pandurata Meyer. Decatur, Van Buren, Henry, and Des Moines Cos.

I. purpurea Lam. Decatur Co. Cultivated fields and waste places, infrequent.

I. hederacea Jacq. Johnson Co. Waste places, infrequent.

Convolvulus sepium L. Decatur, Des Moines, Shelby, and Johnson Cos. Borders and upland woods, frequent.

C. spithameus L. Johnson Co. One specimen collected.

C. arvensis L. Henry and Johnson Cos. Waste places, infrequent.

Cuscuta glomerata Choisy. Decatur and Johnson Cos. Low grounds, frequent.

C. tenuiflora Englm. Decatur and Johnson Cos. Along streams, frequent.

C. inflexa Englm. Decatur Co. Open woods, infrequent.

SOLANACEÆ.

Solanum nigrum L. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Low grounds, frequent.

S. carolinense L. Decatur, Des Moines, Henry, and Johnson Cos. Waste places, frequent locally.

S. rostratum Dunal. Decatur, Henry, and Johnson Cos. Waste places, infrequent.

S. tuberosum L. Decatur Co. Occasionally an escape, but not persistent.

Physalis pubescens L. Decatur Co. Fields and woods, frequent.

P. virginiana Mill. Decatur, Van Buren, and Johnson Cos.

P. lanceolata Mx. Decatur and Shelby Cos. Fields and waysides, frequent.

Lycium vulgare Dunal. Appanoose Co. A few places known where this species has been observed for a generation. Decatur Co. Along the streets, rare.

Datura stramonium L. Decatur, Appanoose, Wapello, and Johnson Cos. Waste places, common.

D. tatula L. Decatur, Appanoose, Wapello, Van Buren, Des Moines, and Johnson Cos. Waste places, common.

SCROPHULARIACEÆ.

Verbascum thapsus L. Decatur, Appanoose, Wapello, Van Buren, Des Moines, and Johnson Cos. Old pastures and waste places, common.

V. blattaria L. Van Buren and Johnson Cos. Waste places, frequent.

Linaria vulgaris Mill. Decatur, Appanoose, Wapello, Van Buren, Des Moines, and Johnson Cos. Waste places, frequent.

Scrophularia nudosa marylandica Gray. Decatur, Van Buren, Des Moines, and Johnson Cos. Woods, frequent.

Collinsia verna Nutt. Jefferson Co. Frequent, locally.

Chelone glabra L. Johnson Co. Wet places, infrequent.

C. obliqua L. Jefferson Co. Infrequent.

Pentstemon pubescens Sol. Appanoose Co. Open woods, frequent.

P. lævigatus digitalis Gray. Appanoose and Johnson Cos. Open woods, frequent.

Mimulus ringens L. Decatur and Johnson Cos. Wet grounds, frequent.

M. jamesii Torr. Des Moines Co. Calcareous springs, frequent.

M. alatus Ait. Appanoose Co. Infrequent.

Gratiola virginiana L. Decatur and Appanoose Cos. Open woods, frequent.

Ilysanthes riparia Raf. Decatur, Van Buren, and Johnson Cos. Along waterways, common.

Veronica virginica L. Decatur, Appanoose, Van Buren, and Johnson Cos. Woods and prairies, common.

V. anagallis L. Appanoose Co. Wet places, frequent.

V. peregrina L. Decatur, Shelby, and Johnson Cos. Wet soil, common.

V. arvensis L. Henry Co.

Seymeria macrophylla Nutt. Van Buren, Des Moines, and Johnson Cos. Open woods, frequent.

Gerardia grandiflora Benth. Appanoose, Van Buren, and Jefferson Cos. Open woods, frequent.

G. auriculata Mx. Decatur and Johnson Cos. Low prairies and open woods, frequent.

G. aspera Dougl. Decatur Co. Low prairies, infrequent.

G. tenuifolia Vahl. Decatur, Washington, and Johnson Cos. Prairies and woods, common.

Castilleja coccinea Spreng. Appanoose and Johnson Cos. Open woods, frequent.

C. sessiliflora Pursh. Shelby Co. Prairies, frequent.

Pedicularis lanceolata Mx. Johnson Co. Springy ground, frequent, locally.

P. canadensis L. Decatur, Shelby, and Johnson Cos. Open woods and prairies, common.

OROBANCHACEÆ.

Aphyllon uniflorum Gray. Decatur, Jefferson, and Johnson Cos. Woods and prairies, infrequent.

BIGNONIACEÆ.

Catalpa speciosa Wardner. Decatur, Des Moines, Shelby, and Johnson Cos. Frequently cultivated, rarely spontaneous.

ACANTHACEÆ.

Ruellia ciliosa Pursh. Decatur, Appanoose, Wapello, Van Buren and Johnson Cos. Open woods, borders, waysides, common.

R. strepens L. Decatur Co. Shaded ravines, frequent locally.

VERBENACEÆ.

Verbena urticifolia L. Decatur, Appanoose, Wapello, Des Moines, and Johnson Cos. Fields and waste places, common.

V. angustifolia Mx. Henry and Johnson Cos. Sandy soil, frequent.

V. hastata L. Decatur, Appanoose, Wapello, Des Moines, Shelby, and Johnson Cos. Fields and waste places, common.

V. stricta Vent. Decatur, Appanoose, Van Buren, Des Moines, Shelby, and Johnson Cos. Fields and upland woods, common.

V. bracteosa Mx. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Waste places, frequent.

Lippia lanceolata Mx. Wapello, Van Buren, and Johnson Cos. Wet grounds, frequent.

Phryma leptostachya L. Decatur, Appanoose, and Johnson Cos. Rich woods, frequent.

LABIATÆ.

Isunthus cœruleus Mx. Johnson Co. Open woods, frequent.

Teucrium canadense L. Decatur, Appanoose, Van Buren, and Johnson Cos. Low grounds, frequent.

Mentha canadensis L. Decatur and Johnson Cos. Low grounds, common.

Lycopus virginicus L. Decatur Co. Low grounds, frequent.

L. rubellus Moench. Decatur Co. Low grounds, infrequent.

L. sinuatus Ell. Decatur, Van Buren, and Johnson Cos. Low grounds, common.

Pycnanthemum lanceolatum Pursh. Decatur, Appanoose, Wapello, and Johnson Cos. Open woods and prairies, frequent.

P. lineifolium Pursh. Decatur, Appanoose, and Johnson Cos. Open woods and prairies, frequent.

Hedeoma pulegioides Pers. Decatur, Van Buren, and Johnson Cos. Open woods, common.

H. hipsida Pursh. Johnson Co. Dry soil, common.

Monarda fistulosa L. Decatur, Appanoose, Wapello, Jefferson, and Johnson Cos. Prairies and open woods, common.

M. punctata L. Johnson Co. Sandy soil, infrequent.

Blephilia hirsuta Benth. Johnson Co. Rich woods, frequent.

Lophanthus scrophulariæfolius Benth. Decatur, Appanoose, and Johnson Cos. Open woods, frequent.

L. nepetoides Benth. Decatur, Van Buren, Des Moines, and Johnson Cos. Open woods, frequent.

Salvia lanceolata Willd. Shelby Co. Dry soil, frequent.

Nepeta cataria L. Decatur, Appanoose, Des Moines, and Johnson Cos. Waste places, common.

N. glechoma Benth. Page, Decatur, Des Moines, and Johnson Cos. Waste grounds near dwellings, frequent.

Scutellaria lateriflora L. Decatur, Appanoose, and Johnson Cos. Woods, frequent.

S. versicolor Nutt. Van Buren, Des Moines, and Johnson Cos. Woods, frequent.

S. parvula Mx. Decatur, Appanoose, Wapello, Shelby, and Johnson Cos. Prairies, frequent.

Brunella vulgaris L. Decatur, Appanoose, Van Buren, Des Moines, and Johnson Cos. Open woods and waste places, common.

Physostegia virginia Benth. Johnson Co. Low woods, frequent.

Leonurus cardiaca L. Appanoose, Des Moines, and Johnson Cos. Waste places, frequent.

Stachys palustris L. Shelby and Johnson Cos. Low places, frequent.

S. aspera Mx. Decatur, Appanoose, and Johnson Cos. Low places, frequent.

PLANTAGINACEÆ.

Plantago rugellii Dec. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Waste places and low woods, common.

P. lanceolata L. Decatur Co. Waste places, becoming frequent.

P. patagonica aristata Gray. Decatur, Appanoose, and Van Buren Cos. Waste places, common.

NYCTAGINACEÆ.

- Oxybaphus nyctagineus* Sweet. Decatur, Wapello, Van Buren, Shelby, and Johnson Cos. Along waterways, frequent.
O. hirsutus Sweet. Shelby Co. Prairie roadsides, frequent.
O. angustifolius Sweet. Decatur Co. Prairies, infrequent.

ILLECEBRACEÆ.

- Anychia dichotoma* Mx. Johnson Co. Woods, frequent.
A. capillacea DC. Decatur and Johnson Cos. Woods, frequent.

AMARANTACEÆ.

- Amarantus retroflexus* L. Decatur, Van Buren, and Johnson Cos.
A. albus L. Decatur Co.
A. blitoides Watson. Decatur and Johnson Cos. Waste places, frequent.
A. chlorostachys Willd. Johnson Co.
A. paniculatus L. Johnson Co.
Acnida tuberculata Moq. Decatur and Johnson Cos. Waste places, frequent.
Chenopodium album L. Decatur, Van Buren, and Johnson Cos. Waste places, common.
C. hybridum L. Decatur Co. Fields, infrequent.

POLYGONACEÆ.

- Rumex britannica* L. Decatur Co.
R. altissimus Wood. Decatur and Johnson Cos. Rich soil, frequent.
R. verticillata L. Appanoose and Johnson Cos. Rich soil, frequent.
R. obtusifolius L. Page and Shelby Cos. Rich soil, frequent.
R. crispus L. Shelby and Johnson Cos. Waste places, common.
R. acetosella L. Decatur, Shelby, and Johnson Cos. Waste places, common.
Polygonum orientale L. Johnson Co. Waste places, infrequent.
P. pennsylvanicum L. Decatur and Johnson Cos. Wet soil, common.

P. lapathifolium incarnatum Watson. Appanoose Co. Wet soil, frequent.

P. hydropiper L. Decatur and Johnson Cos. Wet soil, frequent.

P. hydropiperoides Mx. Johnson Co. Wet soil, frequent.

P. hartwrightii Gray. Henry Co.

P. virginianum L. Decatur and Johnson Cos. Low woods, frequent.

P. aviculare L. Decatur, Appanoose, and Johnson Cos. Waste places, common.

P. erectum L. Decatur Co. Waste places, common.

P. ramosissimum Mx. Decatur, Des Moines, and Johnson Cos. Sandy soil, common,

P. sagittatum L. Johnson Co. Wet soil, common.

P. convolvulus L. Shelby and Johnson Cos. Fields and waste places, common.

P. dumetorium scandens Gray. Decatur Co.

P. cuspidatum Sieb & Jucc. Johnson Co. Rarely an escape into waste places.

Fagopyrum esculentum Moench. Decatur, Appanoose, Des Moines, Shelby, and Johnson Cos. Fields and waste places, infrequent.

ARISTOLOCHIACEÆ.

Asarum canadense D. Decatur, Appanoose, Des Moines, and Johnson Cos. Wooded river bluffs, frequent.

THYMELÆACEÆ.

Dirca palustris L. Johnson Co. Open woods, frequent locally.

SANTALIACEÆ.

Commandra umbellata Nutt. Decatur, Des Moines, and Johnson Cos. Sandy soil in woods, frequent.

EUPHORBIACEÆ.

Euphorbia maculata L. Decatur, Wapello, and Johnson Cos. Waste places, common.

E. prestlii Guss. Decatur, Van Buren, and Johnson Cos. Waste places, frequent.

D. marginata Pursh. Decatur, Van Buren, and Johnson Cos. Waste places, infrequent.

E. corollata L. Decatur, Appanoose, Wapello, Van Buren, Des Moines, Shelby, and Johnson Cos. Fields, prairies, and open woods, common.

E. heterophylla L. Wapello, Van Buren, and Johnson Cos. Rocky wooded banks, frequent.

E. dentata Mx. Des Moines Co. Waste places near railroad, frequent.

E. obtusata Pursh. Johnson Co. Sandy soil in woods, infrequent.

E. cyparissias L. Shelby, Henry, and Johnson Cos. Waste places, infrequent.

Croton glandulosus L. Des Moines Co. Waste places near railroad, frequent.

Acalypha virginica L. Decatur, Van Buren, and Johnson Cos. Fields and waste places, common.

URTICACEÆ.

Ulmus fulva Mx. Decatur, Appanoose, and Johnson Cos. Rich woods, frequent.

U. americana L. Page, Decatur, Appanoose, Wapello, Van Buren, Des Moines, Shelby, and Johnson Cos. Low woods, common.

Celtis occidentalis L. Decatur, Appanoose, and Johnson Cos. Low woods, frequent.

Cannabis sativa L. Decatur, Van Buren, Des Moines, Shelby, and Johnson Cos. Waste places, frequent.

Humulus lupulus L. Decatur, Appanoose, and Johnson Cos. Waysides and thickets, common.

Maclura aurantiaca Nutt. Decatur, Appanoose, Shelby, and Johnson Cos. Formerly much used for hedge fences, sometimes spontaneous.

Morus rubra L. Decatur, Appanoose, Des Moines, and Johnson Cos. Rich woods, frequent.

Urtica gracilis Ait. Decatur Co. Alluvial soil, infrequent.

Pilea pumila Gray. Decatur, Des Moines, and Johnson Cos. Rich woods, common.

Laportea canadensis Gaud. Decatur, Appanoose, and Johnson Cos. Moist woods, common.

Bœhmeria cylindrica Willd. Johnson Co. Moist woods, frequent.

Parietaria pennsylvanica Muhl. Shelby and Johnson Cos. Low woods, frequent.

PLANTANACEÆ.

Plantanus occidentalis L. Decatur, Van Buren, Lee, Des Moines, and Johnson Cos. A frequent tree along the larger rivers.

JUGLANDACEÆ.

Juglans cinerea L. Johnson Co. Rich woods, frequent.

J. nigra L. Decatur, Appanoose, Van Buren, and Johnson Cos. Rich woods, frequent.

Carya alba Nutt. Decatur, Appanoose, Wapello, Van Buren, Shelby, and Johnson Cos. Upland woods, common once but disappearing.

C. sulcata Nutt. Decatur, Appanoose, and Van Buren Cos. Along rivers, once common, yet frequent.

C. amara Nutt. Decatur, Appanoose, Shelby, and Johnson Cos. Rich woods, common.

CUPULIPERÆ.

Betula nigra L. Appanoose and Johnson Cos. Woods, frequent.

Corylus americana Walt. Decatur, Appanoose, Wapello, Van Buren, Shelby, and Johnson Cos. Thickets, common.

Ostrya virginica Willd. Decatur, Henry, and Johnson Cos. Woods, frequent.

Carpinus caroliniana Walter. Decatur, Appanoose, Wapello, Van Buren, Des Moines, and Johnson Cos. Woods, frequent.

Quercus alba L. Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Upland woods, common.

Q. stellata Wang. Appanoose Co. One small grove known.

Q. macrocarpa Mx. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Woods, common. This is a large tree along the rivers, but a shrub on the prairies.

Q. bicolor Willd. Decatur and Appanoose Cos. Along rivers, frequent.

Q. muhlenbergii Englm. Decatur, Appanoose, Van Buren, Henry and Johnson Cos. Woods along streams, frequent.

Q. prinoides Willd. Decatur and Appanoose Cos. Prairies and upland woods, common. Similar to preceding, but of diminutive size, usually one or two feet high.

Q. rubra L. Decatur, Appanoose, Wapello, Van Buren, and Johnson Cos. Woods, frequent.

Q. coccinea Wang. Decatur, Appanoose, and Johnson Cos. Upland woods, common.

Q. palustris Du Roi. Decatur and Appanoose Cos. Low woods, frequent.

Q. imbricaria Mx. Decatur, Appanoose, Wapello, and Washington Cos. Woods, common.

Q. nigra L. Decatur Co. Dry upland woods, frequent.

SALICACEÆ.

Salix longifolia Muhl. Shelby and Page Cos. Frequent.

S. discolor Muhl. Shelby and Johnson Cos. Low grounds, common.

S. humilis Marsh. Decatur, Shelby, and Johnson Cos. Prairies, frequent.

Populus tremuloides Mx. Decatur, Appanoose, Shelby, and Johnson Cos. Upland woods, common.

P. grandidentata Mx. Johnson Co. Woods, common.

P. monilifera Ait. Decatur, Appanoose, Shelby, and Johnson Cos. Rich woods, common.

P. alba L., var. *nivea*. Decatur Co. A frequent escape.

CONIFERÆ.

Juniperus virginiana L. Van Buren and Johnson Cos. River bluffs, frequent.

HYDROCHARDIACEÆ.

Elodea canadensis Mx. Johnson Co. Ponds, frequent.

Vallisneria spiralis L. Johnson Co. Infrequent.

ORCHIDACEÆ.

Microstylis ophioglossoides Nutt. Johnson Co. We have one specimen collected in low woods.

Liparis liliifolia Richard. Upland woods, frequent.

Aplectum hiemale Nutt. Johnson Co. Rich woods, infrequent.

Corallorhiza odontorrhiza Nutt. Johnson Co. Rich upland woods, common at least locally.

Spiranthes gracilis Bigelow. Johnson Co. Open upland woods, infrequent.

Goodyera pubescens R. Br. Johnson Co. Infrequent.

Calopogon pulchellus R. Br. Johnson Co. One specimen with three flowers on season's stem and two capsules on preceding year's stem was collected on top of a bluff in open woods.

Pogonia pendula Lindl. Johnson Co. Woods, infrequent.

Orchis spectabilis L. Johnson Co. Frequent locally.

Habenaria bracteata R. Br. Decatur and Johnson Cos. Woods, infrequent.

H. leucophœa Gray. Decatur Co. Low prairie, infrequent.

Cyripedium parviflorum Salisb. Crawford and Johnson Cos. Rich woods, frequent.

C. pubescens Willd. Decatur, Appanoose, and Johnson Cos. Rich woods, frequent.

C. spectabile Swartz. Johnson Co. Rich upland woods, infrequent.

C. candidum Muhl. Page Co. Infrequent.

IRIDACEÆ.

Iris versicolor L. Decatur and Johnson Cos. Along ponds, marshes, infrequent.

Sisyrinchium angustifolium Mill. Page, Decatur, Des Moines, Shelby, and Johnson Cos. Fields and open woods, common. White and blue flowered forms.

S. anceps Cav. Decatur and Johnson Cos. Open woods infrequent.

AMARYLLIDACEÆ,

Hypoxie erecta L. Decatur, Shelby, and Johnson Cos. Meadows and prairies, common.

DIOSCORIACEÆ.

Dioscorea villosa L. Decatur, Appanoose, Van Buren, and Johnson Cos. Woods, frequent.

LILIACEÆ.

Smilax herbacea L. Decatur, Appanoose, Shelby, and Johnson Cos. Woods, frequent.

S. hispida Muhl. Decatur and Shelby Cos. Woods, frequent.

S. ecirrhata Wats. Johnson Co. Woods, infrequent.

Allium tricoccum Ait. Decatur and Johnson Cos. Rich woods, frequent.

A. canadense Kalm. Decatur, Shelby, and Johnson Cos. Prairies and open woods, frequent.

Polygonum giganteum Dietrich. Decatur, Appanoose, and Shelby Cos. Low woods, frequent.

Asparagus officinalis L. Decatur, Van Buren, Shelby, and Johnson Cos. Waste places, infrequent.

Smilacina racemosa Desf. Decatur, Appanoose, Des Moines, Shelby, and Johnson Cos. Rich woods, common.

S. stellata Desf. Des Moines and Johnson Cos. Low places, infrequent.

Mianthemum canadense Desf. Johnson Co. Upland woods, infrequent.

Uvularia grandiflora Smith. Decatur, Appanoose, and Johnson Cos. Rich woods, frequent.

Oakesia sessilifolia Wats. Des Moines and Johnson Cos. Woods, infrequent.

Erythronium albidum Nutt. Page, Decatur, Van Buren, Shelby, and Johnson Cos. Low woods and fields, common.

Lilium philadelphicum L. Decatur, Shelby, and Johnson Cos. Prairies, infrequent, except Decatur Co., where the species is common.

L. canadense L. Decatur and Johnson Cos.

Trillium recurvatum Beck. Van Buren, Des Moines, Jefferson and Johnson Cos. Low woods, frequent locally.

T. erectum L. Shelby, Crawford, and Johnson Cos. Rich woods, infrequent.

T. nivale Riddell. Johnson Co. Upland woods, common.

Melanthium virginicum L. Decatur Co. Wet sloughs, common locally.

PONTEDERIACEÆ.

Pontedera cordata L. Appanoose and Johnson Cos. Borders of ponds, common locally.

Heteranthera graminea Vahl. Johnson Co. Borders of ponds, common locally.

COMMELINACEÆ.

Tradescantia virginica L. Page, Decatur, Appanoose, Des Moines, Shelby, and Johnson Cos. Prairies and fields, common.

JUNCACEÆ.

Juncus tenuis Willd. Decatur and Johnson Cos. Prairies and waysides, common.

J. nodosus megacephalus Torr. Decatur Co. Wet places, frequent locally

TYPHACEÆ.

Typha latifolia L. Decatur, Wayne, Appanoose, and Johnson Cos. Borders of ponds, common.

Sparganium eurycarpum Englm. Appanoose Co. In shallow water of Goose lake, common.

ARACEÆ.

Arisæma triphyllum Torr. Page, Decatur, Appanoose, Shelby, and Johnson Cos. Woods, common.

A. dracontium Schott. Decatur, Appanoose, Shelby, and Johnson Cos. Damp woods, frequent.

Acorus calamus L. Appanoose and Johnson Cos. Sloughs, frequent.

• LEMNACEÆ.

Spirodela polyrrhiza Schleid. Decatur, Appanoose and Johnson Cos. Ponds, common.

Lemna trisulca L. Johnson Co. Ponds, common locally.

ALISMACEÆ.

Alisma plantago L. Decatur, Appanoose, and Johnson Cos. Ponds and flats, common.

Sagittaria variabilis Englm. Decatur, Appanoose, Shelby, and Johnson Cos. Wet sloughs or shallow water, common.

S. heterophylla Pursh. Appanoose and Johnson Cos. Shallow water, common.

S. graminea Mx. Johnson Co. Margins of ponds and shallow water, frequent.

NAIDACEÆ.

Potamogeton spirillus Tuck. Decatur Co. In a railroad pond, common. Cratty: "This seems to be intermediate between this and *P. diversifolius* Raf. The submerged fruits are mostly peduncled in your specimens, while they are sessile, or very nearly so in true *P. spirillus* Tuck. Hitchcock collected the same at Hamburg."

P. fruitans Roth. Johnson Co. In ponds, common locally.

P. pauciflorus Pursh. Henry Co.

CYPERACEÆ.

Cyperus diandrus Torr. Johnson Co. Sandy soil along river, frequent.

- C. speciosus* Vahl. Decatur Co. Wet soil, frequent.
C. aristatus Rottb. Johnson Co. Sandy soil, frequent.
C. schweinitzii Torr. Johnson Co. Sandy soil, common.
C. filiculmis Vahl. Johnson Co. Sandy soil, frequent.
C. strigosus L. Decatur, Van Buren, and Johnson Cos.
 Low, sandy soil, common.
Eleocharis palustris R. Br. Decatur, Shelby, and Johnson
 Cos. Wet soil, common.
E. tenuis Schultes. Decatur Co.
E. acicularis R. Br. Johnson Co. Wet soil, common.
E. ovata R. Br. Decatur and Appanoose Cos. Wet soil, or
 in shallow water, common locally.
Scirpus lacustris L. Decatur, Appanoose, Shelby, and John-
 son Cos. Ponds or wet soil, common
S. atrovirens Muhl. Decatur, Shelby, and Johnson Cos.
 Wet soil, common.
Eriophorum polystachyon L. Johnson Co. Specimens col-
 lected by Prof. Shimek.
E. lineatum Benth & Hook. Decatur Co. Low prairies,
 frequent
Hemicarpha subsquarrosa Nees. Johnson Co. Sandy soil
 along river, infrequent
Scleria triglomerata Mx. Decatur Co. Prairies, frequent.
Carex intumescens Rudge. Appanoose Co. Wet woods, fre-
 quent.
C. grayii Carey. Appanoose Co.
C. squarrosa L. Appanoose Co. Swamps, frequent.
C. hystericina Muhl. Decatur, Shelby, and Johnson Cos. Low
 grounds, common.
C. filiformis latifolia Boeckl. Shelby and Johnson Cos.
C. trichocarpa Muhl. Shelby Co.
C. trichocarpa aristata Bailey. Johnson Co.
C. stricta Lam. Shelby and Johnson Cos.
C. davisii Schwein. & Torr. Johnson Co.
C. longirostris Torr. Johnson Co.
C. crawii Dewey. Shelby Co.
C. laxiflora Lam. Decatur and Shelby Cos.
C. laxiflora striatula Carey. Shelby and Johnson Cos.
C. granularis Muhl. Shelby Co.
C. tetanica Bailey. Johnson Co.
C. pennsylvanica Lam. Decatur, Shelby, and Johnson Cos.
 Prairies and woods, common.

- C. stipata* Muhl. Shelby and Johnson Cos.
C. gravida Bailey. Johnson Co.
C. vulpinoidea Mx. Decatur, Appanoose, and Johnson Cos.
C. rosea Schkuhr. Decatur, Shelby, and Johnson Cos.
 Woods, common.
C. sparganoides Muhl. Decatur Co.
C. cephalophora Muhl. Johnson Co.
C. tribuloides cristata Bailey. Decatur Co.
C. scoparia Schkuhr. Johnson Co.
C. straminea Willd. Decatur Co.
C. straminea brevior Dewey. Decatur, Shelby and Johnson
 Cos.
C. straminea aptera Boott Johnson Co.

GRAMINEÆ.

- Spartina cynosuroides* Willd. Decatur and Appanoose Cos.
 Sloughs, common.
Panicum leibergii Schribn. Decatur Co. Meadows, frequent.
P. sanguinale L. Decatur, Wapello, Van Buren, and Johnson
 Cos. Fields and waste places, common.
P. capillare L. Decatur, Wapello, and Johnson Cos.
P. virgatum L. Decatur Co. Low prairies, frequent.
P. lanuginosum Ell. Decatur and Appanoose Cos. Meadows,
 frequent.
P. depauperatum Muhl. Johnson Co.
P. crus-galli L. Decatur, Wapello, and Johnson Cos. Wet
 grounds, common.
P. macrocarpon Le Conte. Decatur and Johnson Cos. Woods,
 frequent.
Setaria glauca Beauv. Decatur, Appanoose, Wapello, and
 Johnson Cos. Fields and waste places, common.
S. viridis Beauv. Decatur and Johnson Cos. With the pre-
 ceding.
S. italica Kunth. Decatur, Van Buren, and Shelby Cos.
 Waste places, frequent.
S. verticillata Beauv. Johnson Co. Near dwellings, fre-
 quent.
Cenchrus tribuloides L. Decatur, Wapello, Van Buren, and
 Johnson Cos. Sandy soil, common.
Leersia oryzoides Swartz. Decatur Co.
Zizania aquatica L. Johnson Co. Ponds, frequent.

Tripsacum dactyloides L. Decatur and Appanoose Cos. Sloughs, frequent locally.

Andropogon furcatus Muhl. Decatur, Appanoose, and Johnson Cos. Prairies, common.

Chrysopogon nutans Benth. Decatur Co. Prairies, frequent.

Phalaris canariensis L. Johnson Co. An occasional escape.

P. arundinacea L. Johnson Co. Wet soil, infrequent.

Aristida oligantha Mx. Decatur Co. Dry soil, common.

Stipa spartea Trin. Decatur, Shelby, and Johnson Cos. Prairies, frequent.

Muhlenbergia mexicana Trin. Johnson Co. Low places, frequent.

Phleum pratense L. Decatur, Appanoose, Shelby, and Johnson Cos. Cultivated, a frequent escape.

Alopecurus geniculatus L. Johnson Co. Borders of ponds, infrequent.

Sporobolus cryptandrus Gray. Johnson Co.

Agrostis alba L. Decatur Co. Meadows, common.

A. perennans Tuck. Decatur Co. Frequent.

Cinna arundinacea L. Johnson Co.

Calamagrostis canadensis Beauv. Decatur Co.

Bouteloua racemosa Lag. Decatur, Appanoose, and Johnson Cos. Prairies, frequent.

Triodia cuprea Jacq. Decatur and Van Buren Cos. Sandy soil near water courses, common.

Koeleria cristata Pers. Decatur, Shelby, and Johnson Cos. Prairies, frequent.

Eatonia pennsylvanica Gray. Shelby and Johnson Cos.

Eragrostis reptans Nees. Decatur, Van Buren, and Johnson Cos. River banks, common.

E. major Host. Decatur and Johnson Cos. Waste places, common.

E. purshii Schrader. Decatur and Johnson Cos. Waste places, frequent.

Melica mulica Walt. Johnson Co. Open woods, frequent.

Diarrhena americana Beauv. Decatur Co. Frequent.

Dactylis glomerata L. Decatur, Shelby, and Johnson Cos. Orchards and waste places, frequent.

Poa trivialis L. Shelby and Johnson Cos. Meadows and borders, common. This is frequently mistaken for *P. pratensis* L.

Glyceria nervata Trin. Decatur, Shelby, and Johnson Cos.
Low prairies, common.

Festuca tenella Willd. Johnson Co.

F. shortii Kunth. Decatur Co. Low prairies, common.

Bromus secalinus L. Decatur and Johnson Cos. Fields and waste places, frequent.

B. ciliatus L., Decatur Co.

B. ciliatus purgans Gray. Decatur, Appanoose, and Johnson Cos. Rich woods, frequent.

Agropyrum repens Beauv. Decatur Co. Waste places, frequent.

A. spicatum (Pursh.) Scribn. & Smith. Shelby Co.

Hordeum jubatum L. Decatur, Shelby, and Johnson Cos.
Waste places, common.

H. pussillum Nutt. Decatur and Johnson Cos. Waste places, becoming frequent. Johnson Co. specimens collected by Professor Shimek.

Elymus canadensis L. Decatur, Appanoose, Wapello, Des Moines, and Johnson Cos. Prairies and river banks, common.

E. striatus Willd. Johnson Co. Woods, frequent.

E. virginicus L. Decatur, Appanoose, and Johnson Cos.
Prairies and woods, common.

Asprella hystrix Willd. Appanoose and Johnson Cos. Woods, frequent.

EQUISETACEÆ.

Equisetum arvense L. Decatur, Des Moines, Shelby, and Johnson Cos. Moist soil, frequent.

E. hyemale L. Decatur, Appanoose, Des Moines, and Johnson Cos. Wet places, frequent.

E. lævigatum Braun. Shelby Co. Fields and waysides, common.

FILICES.

Adiantum pedatum L. Decatur, Appanoose, Van Buren, Shelby, and Johnson Cos. Rich woods, common.

Pteris aquilina L. Upland woods, frequent.

Pellaea atropurpurea Link. Johnson Co. Cliffs, frequent.

Asplenium flix-fœmina Bernh. Decatur, Appanoose, Shelby, and Johnson Cos. Woods, common.

Camptosorus rhizophyllus Link. Johnson Co. Moist ravines, frequent.

Phegopteris hexagonoptera Fee. Johnson Co. Woods, frequent.

Aspidium thelypteris Swartz. Johnson Co. Boggy places, locally frequent.

A. aerostichoides Swartz. Johnson Co. Rare.

Cystopteris bulbifera Bernh. Johnson Co. Base of cliffs, common.

C. fragilis Bernh. Decatur, Appanoose, Van Buren, Des Moines, Shelby, and Johnson Cos. Woods, common.

Onoclea sensibilis L. Decatur, Appanoose, and Johnson Cos. Moist woods, frequent.

O. struthiopteris Hoff. Shelby and Johnson Cos. Woods, common.

Woodsia obtusia Torr. Decatur, Van Buren, and Johnson Cos. Cliffs, frequent.

Osmundia claytoniana L. Decatur and Appanoose Cos. Moist woods, frequent.

OPHIOGLOSSACEÆ.

Botrychium virginianum Swartz. Decatur, Appanoose, Shelby, and Johnson Cos. Rich woods, frequent.

LYCOPODIACEÆ.

Lycopodium clavatum L. Johnson Co. Local, rare.

L. complanatum L. Johnson Co. Local, rare.

JUNGERMANNIACEÆ.

Lejunia serphyllifolia americana Lindl. Johnson Co. Base of trees, common.

Porella platyphylla Lindb. Johnson Co. On lime rocks and moist banks, common.

Cephalozia multiflora Spruce. Johnson Co. In moist situations, on ground among lichens, infrequent.

Lophocolea minor Nees. Johnson Co. On moist banks, infrequent.

Plagiochila asplenoides Dumort. Johnson Co. Moist banks, infrequent.

ANTHOCEROTACEÆ.

Anthoceros lævis L. Johnson Co. Moist low grounds, frequent.

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MARCHANTIACEÆ.

Marchantia polymorpha L. Johnson Co. Low grounds and over rocks, common.

Conocephalus conicus Dumort. Johnson Co. Rocks along shallow streams, common.

Asterella hemispherica Beauv. Johnson Co. On shady moist banks, common.

RICCIACEÆ.

Riccia crystallina L. Decatur and Johnson Cos. Fields and mud flats, common.

R. fluitans L. Johnson Co. Cratty sends us the same from Emmet Co. Floating on water, perhaps not common.