1896

Spermaphyta of the Flora of Fayette, Iowa

Bruce Fink

Recommended Citation
Fink, Bruce (1896) "Spermaphyta of the Flora of Fayette, Iowa," Proceedings of the Iowa Academy of Science, 4(1), 81-107. Available at: https://scholarworks.uni.edu/pias/vol4/iss1/17
IOWA ACADEMY OF SCIENCES.

Cladophora fracta var. gossypina Kg. (?) Common in West Lake Okoboji.

Cladophora fracta Kg. var. In West Lake Okoboji.

Hydrodictyon utriculatum. Very common in Lime creek, at Forest City.

SPERMAPHYTA OF THE FLORA OF FAYETTE, IOWA.

BRUCE FINK.

INTRODUCTION.

A considerable amount of work has been done on the flora of the vicinity of Fayette since the early settlement, and during the last five years the writer has explored the region thoroughly. Nearly 200 of the plants of this list have been carefully compared by the writer and other persons at the herbaria of the University of Minnesota and Harvard university. I have also had the aid of specialists on five difficult genera, and altogether the list of a few more than 700 species and varieties has been carefully worked out.

The early work was done by Dr. C. C. Parker who, previous to 1876, had collected and preserved nearly 500 specimens of our herbaceous plants. Dr. Parker's herbarium contains twenty-eight plants not found by the writer, which are listed. They may be known, as he is given credit for the collecting. I am also indebted to him for the use of his herbarium in preparing this record, and for valuable aid in finding several rare plants.

As to territory covered, the list is approximately complete for the region within five miles of Fayette. A few plants are included which were collected ten or fifteen miles away, but the work is doubtless quite incomplete for some portions of Fayette county. This region furnishes a good field for the study of the higher plants, as the topographical features are quite varied. Prairies, woods, rivers, springs, marshes, ponds, hills and limestone ledges all abound. The woods, even after so much clearing has been done, are a more inviting field for study than the limited amount of unbroken prairie. Twenty years ago the prairie grasses and sedges were surely much more abundant than now, but unfortunately they were not
studied till quite recently, after the prairies had been largely brought under cultivation. This accounts for the small number of grasses and sedges listed, after I have collected them as carefully as other genera—except the genus Carex, which needs more study.

I wish to express my thanks to Dr. B. L. Robinson, and to Prof. Conway MacMillan, for the use of the herbaria mentioned above, in comparing plants. The late Mr. M. S. Bebb named the species of Salix, Mr. M. L. Fernald those of Carex (except four species collected by Mr. A. S. Skinner and Miss Ona M. Rounds in 1896, which were determined by Mr. R. I. Cratty), Prof. C. S. Sargent those of Quercus, and Mr. R. I. Cratty those of Sagittaria and Potamogeton. Mr. A. A. Heller and Mr. J. W. Blankinship also aided in the determination of a number of species. To all of these gentlemen I am greatly obliged for the aid freely given.

That the unrest in botanical synonymy is to continue for some time is certain, if, indeed, all features of it can be permanently settled. I have used the arrangement and synonymy of Gray's Manual, sixth edition, which doubtless is not to stand long without radical change. The work has grown up under this system, and it will serve its purpose so that this record can be used in the future study of this vicinity or a somewhat larger one. Furthermore, this manual has commonly been used in Iowa in making general lists.

The plants herein recorded will be found in the herbaria of the persons who are credited with the collections. The herbarium of the Upper Iowa university contains nearly all the species also, and the writer has collected 640 of them for the United States National Herbarium. These last were delivered in 1894.

Nearly all the species listed were collected by the writer. Other collectors are given credit for the plants collected by them. Besides, Dr. C. C. Parker, Mr. J. R. Gardner, Mr. A S. Skinner, Mr. R. B. Wylie, Miss Gem E. Rounds, Miss Ona M. Rounds, Miss Etna Burrette and Mr. W. F. Baker have each added to the work by their collecting. I am under obligations to all of them for this help.

Several species are herein reported for the first time in Iowa, as is indicated with the names of these plants. Further study of this vicinity will bring out new information regarding the families here treated. If this list shall aid in such investiga-
tion or prove helpful to the botanists of other parts of Iowa, I shall feel well rewarded for the many days spent in collecting and studying the plants and in the final preparation of this paper.

LIST OF SPECIES.

RANUNCULACEÆ.

*Clematis virginiana* L. Banks and low thickets, infrequent.

*Anemone patens* L., var. *nuttalliana* Gray. High prairies, common

*A. caroliniana* Walt. Prairies, rare.

*A. cylindrica* Gray. Woods, frequent.

*A. pennsylvanica* L. Low prairies, common.

*A. nemerosa* L. Dry woods, common.

*Hepatica acutiloba* D. C. Woods, common. *H. triloba* Chaix

is frequently reported here, but does not occur.

*Anemonella thalictroides* Spach. Woods, abundant.

*Thalictrum dioicum* L. Woods, common.

*T. purpurascens* L. Low prairies, infrequent.

*Ranunculus circinatus* Sibth. Ponds, probably rare. The leaves are sessile or nearly so, have stipules and are more rigid than those of the next.


Coll. Mr. R. B. Wylie.

*R. multiplex* Pursh. Ponds, rare.

*R. rhomboidens* Goldie. Prairies, frequent.

*R. abortivus* L. Low open woods, common.


*R. septentrionalis* Poir. Borders of swamps; infrequent.

*R. hispidus* Hook. Woods, apparently frequent; but probably

*R. repens* L. or *R. pennsylvanica* L. occurs and has been con­fused with the above. Not before reported in Iowa.


*Caltha palustris* L. Wet ground, infrequent.

*Aquilegia canadensis* L. Along bluffs, frequent.

*Delphinium exaltatum* Ait. Low prairies, rare.

*D. ajacis* L. Sparingly escaped.


*A. alba* Bigel. Woods along bluffs, rare.

*Hydrastis canadensis* L. Rich woods, rare.
MENISPERMACEÆ.

*Menispermum canadense* L. Along sandy river banks, rare.

BERBERIDACEÆ.

*Caulophyllum thalictroides* Michx. Woods, frequent.
*Podophyllum peltatum* L. Woods, common.

NYMPHÆACEÆ.

*Nymphaea odorata* Ait. Ponds, infrequent.
*Nuphar advena* Ait. Ponds, infrequent.

PAPAVERACEÆ.

*Sanguinaria canadensis* L. Woods, common.

FUMARIACEÆ.

*D. canadensis* Gray. Woods, rare. Fruit collected here in 1894 by Miss Etna Burrette. Only reported elsewhere in Iowa by Mr. E. W. D. Holway, at Decorah. Single spot a few rods square known here.

CRUCIFERÆ.

*Cardamine rhomboidea* D. C. Wet ground, common.
*C. hirsuta* L. Wet ground, frequent.
*Arabis levigata* Poir. Wooded hillsides, rare. Leaves usually entire except those at the base.
*A. canadensis* L. Open woods, frequent.
*Draba caroliniana* Walt. Waste ground, infrequent.
*D. caroliniana* Walt., var. micrantha Gray. Waste ground, common.
*Nasturtium officinale* R. Br. Streams and springs, rather rare.
*N. palustrum* D. C. Wet ground, frequent.
*N. armoracia* Fries. Escaped, rare.
*Hesperis matronalis* L. Escaped, rare.
*Erysimum cheiranthoides* L. Low ground, infrequent.
*Sisymbrium canescens* Nutt. A single spot known here in a sandy opening.
*S. officinale* Scop. Waste ground, common.
*Thelypodium pinnatifidum* Watson. River banks, rare.
*Brassica nigra* Koch. Waste ground, common.
*Lepidum intermedium* Gray. Waste ground, common.
CAPPARIDACEAE.

*Polanisia graveolens* Raf. (?) *Probably P. trachyspermum* Torr. and Gray. Sandy ground, rare.

CISTACEAE.

*Helianthemum canadense* Michx. Dry hills, infrequent.

*Lechea minor* L. Dry prairies, infrequent.

VIOLACEAE.

*Viola pedata* L. Prairies and open woods, common.

*V. pedatifida* Don. Prairies, frequent.

*V. palmata* C., var. *cucullata* Gray. Low prairies, common.

*V. sagittata* Ait. Found only in the first railroad cut two miles south of Fayette.

*V. blanda* Willd. Moist prairies, rare. Mr. W. F. Baker, coll.

*V. pubescens* Ait. Woods, common.

*V. tricolor* L. Rarely escaped.

CARYOPHYLLACEAE.

*Saponaria officinalis* L. Frequently escaped.

*Silene stellata* Ait. Woods, frequent.

*S. nivea* Otth. Low prairies and woods, frequent.

*S. antirrhina* L. Dry ground, frequent.

*S. noctiflora* L. Rarely escaped.

*Lychmis githago* Lam. In fields, rare.

* Arenaria michauxii* Hook. Dry prairies, infrequent.

*A. lateriflora* L. Low prairies, rather infrequent.

*Stellaria media* Smith. Low woods, infrequent.


* Cerastium vulgatum* L. Dr. C. C. Parker, coll. Marked in herb. *C. viscosum* L.

*C. arvense* L., var. *oblongifolium* Britt and Hall. Dry woods, rare.

PORTULACACEAE.

*Portulaca oleracea* L. Cultivated and waste ground, abundant.

*Claytonia virginica* L. Moist woods, common.

HYPERICACEAE.

*Hypercum ascyron* L. Banks of streams, infrequent.

*H. maculatum* Walt. Wet prairies, frequent.


MALVACEÆ.

Malva rotundifolia L. About yards, frequent.
M. sylvestris L. About yards, rare. Also collected by Dr. C. C. Parker.

Napaea dioca L. Low sandy soil, very rare.
Abutilon avicennae Gærtn. Waste ground, frequent.
Hibiscus trionum L. Waste ground, rare.

TILIACEÆ.

Tilia americana L. Woods, frequent.

LINACEÆ.

Linum sulcatum Riddell. Dry prairies, frequent.
L. usitatissimum L. Occasionally escaped.

GERANIACEÆ.

Geranium maculatum L. Woods, common.
G. carolinianum L. Waste ground; only two plants have been collected here.
Oxalis violacea L. Waste ground, etc., abundant.
O. corniculata L., var. stricta Sav. Woods and waste ground, common.
Impatiens pallida Nutt. Wet shady places, frequent.
I. fulva Nutt. With the last, frequent.

FUTACEÆ.

Xanthoxylum americanum Mill. Woods, common.

CELASTRACEÆ.

Calastrus scandens L. Wooded river banks, infrequent.
Euonymus atropurpureus Jacq. Woods, rare.

RHAMNACEÆ.

Ceanothus americanus L. Open woods, common.

VITACEÆ.

Vitis riparia Michx. River banks and low woods, common.
Ampelopsis quinquefolia Michx. Woods, infrequent.

SAPINDACEÆ.

A. dasycarpum Ehrh. River banks, infrequent.
Negundo aceroides Moench. Low woods, infrequent.
Staphylea trifolia L. Woods, infrequent.
ANACARDIACEÆ.

*Rhus typhina* L. Common five miles east of Fayette. Probably rare further west in Iowa.
*R. glabra* L. Woods, common. The form with laciniate leaves is represented by a specimen (herb. Dr. C. C. Parker) marked var. laciniaata.
*R. toxicodendron* L. Rocky river banks, common. The climbing form, *R. radicans* L., has been noticed but once.

POLYGALACEÆ.

*Polygala senaga* L. Woods, common.
*P. incarnata* L. Dry ground, rare. Dr. C. C. Parker, coll.
*P. sanguinea* L. Prairies, common.
*P. verticillata* L. Prairies, probably rare. Dr. C. C. Parker, coll.

LEGUMINOSÆ.

*Baptisia leucophlea* Nutt. Prairies, frequent.
*B. leucantha* Torr and Gray. Prairies, frequent.
*Trifolium pratense* L. Cultivated and spontaneous, common.
*T. repens* L. Cultivated and spontaneous, common.
*T. procumbens* L. Rare. Dr. C. C. Parker, coll.
*Melilotus officinalis* Willd. Waste ground, rare.
*M. alba* Lam. Waste ground, infrequent.
*Amorpha canescens* Pursh. Prairies, infrequent.
*A. fruticosa* L. River banks, frequent.
*Petalostemon violaceus* Michx. Prairies, common.
*P. candidus* Michx. Prairies and open woods, common.

Robinia pseudacacia L. Cultivated and rarely escaped.
*Wistaria frutescens* Poir. (?) Rare. Miss Gem E. Rounds, coll., whose specimen was too fragmentary for certain determination. Whether this or not, the plant is no leguminous plant ever reported in Iowa.
*Astragalus caryocarpus* Ker. Prairies, frequent.
*A canadensis* L. Borders of woods, infrequent.
*Desmodium acuminatum* D. C. Woods, common.
*D. illinoense* Gray. Prairies, frequent.
*D. paniculatum* D. C. Low prairies, rare. Approaches
*D. dillenii*, Darl.
*D. canadense* D. C. Woods and prairies, common.
Lespedeza leptostachya Engelm. Dry woods, a single specimen collected.

L. capitata Michx. Prairies, frequent.
Vicia caroliniana Walt. River banks, rare. Dr. C. C. Parker, coll.

V. americana Muhl. River banks, rare.

Lathyrus ochroleucus Hook. Prairies along borders of woods, rare.

L. venosus Muhl. Wooded hillsides, frequent.
L. palustris D. Borders of swamps, infrequent.

Amphicarpae monoica Nutt. Woods, probably rare. Dr. C. C. Parker, coll.


Cassia chamæcrista L. Sandy ground, frequent.

Gymnocladus canadensis Lam. Woods, rare. Dr. C. C. Parker, coll., who has a tree in his yard transplanted from the woods.

Gleditschia tricanthos L. Woods, rare.

ROSACEÆ.

Prunus americana Marsh. Thickets and woods, frequent.
P. pennsylvanica L. Woods, rare.
P. virginiana L. Woods, frequent.
P. serotina Ehrh. Woods, infrequent.

Spiræa salicifolia L. Low prairies, frequent.

Physocarpus opulifolius Maxim. Rocky banks, frequent.

Rubus strigosus Michx. Woods, infrequent.
R. occidentalis L. Woods, frequent.
R. villosus Ait. Woods, infrequent.

Geum album Gmelin. Woods, frequent.

G virginianum L. Woods and borders, infrequent.
G. triflorum Pursh. Dry hills, rare.

G. strictum Ait. Low ground, rare. Dr. C. C. Parker, coll.

Fragaria virginiana Mill., var. illinoensis Gray. Low prairies and woods, common.

F. vesca L. Rocky ground, infrequent.
Potentilla arguta Pursh. Prairies, frequent.
P. norvegica L. Low ground near streams, common.
P. rivalis Nutt. Sandy ground, probably rare.
P. canadensis L. Waste ground and open woods, common.
Agrimonia eupatoria L. Woods, common.
Rosa blanda Ait. Prairies and open woods, common.
R. arkansana Porter. Prairies, rare.
Pyrus coronaria L. Woods, frequent.
Crataegus coccinea L. Woods, common. Varieties may occur.
Amalanchier canadensis Torr. and Gray. Along streams, frequent.
A. canadensis Torr, and Gray, var. oblongifolia Torr. and Gray. With the last, infrequent.

SAXIFRAGACEÆ.

Saxifraga pennsylvanica L. Low prairies, common.
Mitella diphylla L. High woods, common.
Heuchera hisrida Pursh. Prairies, common.
Prunus caroliniana Michx. River banks, rare.
Ribes cynosbati L. Woods, frequent.

CRASSULACEÆ.
Penthorum sedoides L. Wet ground, frequent.

UMAERLLIFERÆ.
Lythrum alatum Pursh. Low ground, common.

ONAGRACEÆ.
Ludwigia polycarpa Short and Peter. Borders of swamps, infrequent.
L. palustris Ell. Swamps, common.
Epilobium lineare Mühl. Bogs, rare.
E. coloratum Mühl. Low ground, common.
Oenothera biennis L. Waste ground, frequent.
Oe. rhombipetala Nutt. Dry soils, infrequent.
Oe. serrulata Nutt. Dry prairies, frequent.
Circeæ lutetiana L. Woods, common.

CUCURBITACEÆ.
Echinocystis lobata Torr. and Gray. Banks of streams, infrequent.

FICOIDEÆ.
Mollugo verticillata L. Sandy ground, common.
UMBELLIFERÆ.

*Daucus carota* L. Occasionally escaped.

*Heracleum lanatum* Michx. Woods and openings, frequent.

*Pastinaca saliva* L. Occasionally escaped.

*Thaspium aureum* Nutt. Low prairies and woods, frequent.

*Pimpinella integerrima* Benth. and Hook. Rocky hills, rather rare.

*Cryptopœnia canadensis* L. Woods, common.

*Sium cicutaefolium* Gmelin. Low prairies, frequent.

*Carum carvi* L. Frequently escaped.

*Cicuta maculata* L. Borders of ponds, infrequent.

*Osmorrhiza brevistylis* DC. Woods, frequent.

*O. longistylis* DC. Woods, frequent.

*Eryngium yuccæfolium* Michx. Low prairies, common.

*Sanicula marylandica* L. Woods, common.

ARALIACÆ.

*Aralia racemosa* L. Woods, infrequent.

*A nudicaulis* L. Woods, frequent.

*A. quinquefolia* D. and Planch. Woods, rare.

CORNACEÆ.


*C. sericea* L. Low woods, infrequent.

*C. stolonifera* Michx. Low grounds, rare.

*C. paniculata* L’Her. Wooded river banks, frequent.

*C. alternifolia* L. Wooded river banks, infrequent.

CAPRIFOLIACEÆ.

*Adoxa moschatellina* L. Growing about old stumps, rare.

Only other locality known in Iowa is at Decorah, where Mr. E. W. D. Holway finds it.

*Sambucus canadensis* L. Low woods and clearings, frequent.

*S. racemosa* L. (?) Dr. C. C. Parker says this plant has occurred here, but I have not seen a specimen.

*Viburnum opulus* L. River banks, rare.

*V. pubescens* Pursh. Rocky woods, infrequent.

*V. lentago* L. Woods and clearings, frequent.

*Triosteum perfoliatum* L. Woods, common.


*Lonicera tartarica* L. Two or three plants along the Volga river.
L. glauca Hill. Woods, common.

Diervilla trifida Mönch. A single plant was collected along the Volga river by Mr. A. S. Skinner. Elsewhere reported in Iowa only at Decorah by Mr. E. W. D. Holway.

RUBIACEÆ.

Galium aparine L. Low woods, common.
G. boreale L. Low prairies and banks of streams, common.
G. trifidum L. Low ground, common.
G. trifidum L., var. latifolium Torr. Low ground, infrequent.

VALERIANACEÆ.

Valeriana edulis Nutt. Wet prairies, common.

COMPOSITÆ.

Veronica fasciculata Michx. Low ground, frequent.
Eupatorium purpureum L. Low ground, common.
E. serotinum Michx. Borders of woods, rare.
E. altissimum L. Dry ground, infrequent.
E. perfoliatum L. Low ground, common.
E. ageratoides L. Woods, common.
Kuhnia eupatorioides L. Dry prairies, abundant.
K. eupatorioides L., var. corymbulosa Torr. and Gray. With the last, probably frequent.

Liatris cylindrica Michx. Prairies, common.
L. scariosa Willd. Prairies, frequent.
L. pycnostachya Michx. Prairies, common.
Solidago latifolia L. Woods, common.
S. speciosa Nutt. Dr. C. C. Parker, coll., probably rare.
S. ulmifolia Muhl. Open woods and prairies, frequent.
S. missouriensis Nutt. Prairies, infrequent.
S. serotina Ait. Prairies, infrequent.
S. serotina Ait., var. gigantea Gray. Prairies, common.
S. nemoralis Ait. Dry prairies, infrequent.
S. canadensis L. Prairies, common.
S. rigida L. Dry prairies, common.
S. lanceolate L. Low prairies, infrequent. Dr. C. C. Parker and Mr. J. R. Gardner have both collected the plant.

Aster oblongifolius Nutt., var. rigidulus Gray. Dry prairies, rare.
A. *novae-angliae* L. Low prairies, frequent.
A. *sericeus* Vent. High prairies, frequent.
A. *shortii* Hook. Prairies, rare. Has the hary petioles of *A. azureus* Lindl., and the leaves are also slightly pubescent above.
A. *cordifolius* L. Borders of woods, infrequent.
A. *sagittifolius* Willd. Borders and open woods, common.
A. *laxis* L. Prairies and open woods, common.
A. *multiflorus* Ait. Dry prairies, abundant.
A. *diffusus* Ait. Low ground, common,
A. *paniculatus* Lam. Low ground, abundant.
A. *novi-belgii* L. (?) Dr. C. C. Parker, coll. Specimen fragmentary.
A. *prenanthoides* Muhl. Low ground, rather rare.
A. *umbellatus* Mill. Low woods and prairies, frequent.
*Erigeron canadensis* L. Waste ground, abundant.
*E. annuus* Pers. Waste ground, common.
*E. strigosus* Muhl. Waste ground, frequent.
*E. bellidifolius* Muhl. Moist woods, common.
*E. philadelphicus* L. Moist woods, frequent.
*Antennaria plantaginifolia* Hook. High woods and prairies, common.
*Gnaphalium polycephalum* Michx. Fields and open woods, frequent.
*Polymnia canadensis* L. Shaded moist places, infrequent.
*Silphium laciniatum* L. Prairies, common.
*S. integrifolium* Michx. Low prairies and open woods, frequent.
*S. perfoliatum* L. Along streams, infrequent.
*Parthenium integrifolium* L. Prairies and open woods, common.
*Ambrosia trifida* L. Moist ground, common.
A. *trifida* L., var. *integrifolia* (Muhl.) Torr. and Gray. With the last or in dry places, infrequent.
A. *artemisiiformis* L. Waste ground, abundant.
A. *psilostachya* D. C. Waste ground, only two small patches known here.
*Xanthium canadense* Mill. Waste ground, frequent.
*Heliopsis scabra* Dunal. Prairies, frequent.
*Echinacea augustifolia* DC. Prairies, frequent.
*Rudbeckia laciniata* L. Low ground, common.
R. triloba L. Dry prairies, common.
R. subtomentosa Pursh. Prairies, infrequent. Dr. C. C. Parker, coll.

R. hirta L. Prairies, frequent.
Lepachys pinnata Torr. and Gray. Prairies, common.
Helianthus annuus L. Waste ground, infrequent.
H. rigidus Desf. Prairies, frequent.
H. occidentalis Riddell. Prairies, common.
H. laetiflorus Pers. Prairies, rare. Dr. C. C. Parker, coll.
H. grosse-serratus Martens. Prairies, frequent. One plant placed here after comparison must be a very unusual form, or a different species; others are the usual form.

H. giganteus L. Low ground, rare.
H. giganteus L. var. ambiguus Torr. and Gray. Prairies, frequent. The plant may be H. maximiliani Shrad. instead.
H. divaricatus L. (?) Dr. C. C. Parker, coll. Specimen not certain.

H. hirsutus Raf. Dry prairies, frequent.
H. strumosus L. Low ground, frequent.
H. tracheliotifolius Willd. Low thickets, rare.
H. tuberosus L. Prairies and borders, frequent.
Coreopsis palmata Nutt. Prairies, common.
Bidens frondosa L. Low ground, abundant.
B. connata Muhl. Wet ground, common.
B. connata Muhl., var. comosa Gray. With the last, frequent.
B. cernua L. Wet ground, probably common. Dr. C. C. Parker, coll.

B. chrysanthemoides Michx. Wet ground, frequent.
Helianium autumnale L. Moist ground, common.
Anthemis cotula L. Waste ground, abundant.
Achillea millefolium L. Prairies, common.
Tanacetum vulgare L. Occasionally escaped.
Artemisia caudata Michx. Sandy soil, common.
A. dracunculoideae Pursh. Sandy river banks, infrequent.
A. serrata Nutt. Low prairie, rare.
A. ludoviciana Nutt. Prairie, common and variable.
A. biennis Willd. Sandy soil, rare. Dr. C. C. Parker, coll.
A. absinthium L. Rarely escaped. Dr. C. C. Parker, coll.
Senecio aureus L. Low ground, common.
S. aureus L., var. balsamite (Muhl.) Tarr. and Gray. With the last, probably rare.

Cacalia suaveolens L. Borders of woods, infrequent.
C. reniformis Mühl. Open damp woods, frequent.
C. tuberosa Nutt. Low prairies, frequent.
Erechtites hieracifolia Raf. Moist ground, rare. Dr. C. C Parker, coll.
Arctium lappa L Waste ground, common. Probably varieties occur.
Chicus lanceolatus Hoffm. Pastures and waste ground, common.
C. Altissimus Willd. Low woods, frequent.
C. Altissimus Willd., var. discolor Gray. Waste ground, frequent.
C. Arvensis Hoffm. Mr. C. F. Paine reports this plant from two places in Fayette county.
Krigia amplexicaulis Nutt. Woods, common.
Cichorium intybus L. Roadsides, infrequent.
Tragopogon pratensis L. A single specimen collected in a street of Fayette. Not before reported in Iowa.
Hieracium canadense Michx. Open woods and prairies, frequent.
Prenanthes racemosa Michx. Low prairies, infrequent
P. aspera Michx. Prairies, rare. Dr. C. C. Parker, coll.
P. alba L. Woods and borders, frequent.
Troximon cuspidatum Pursh. High prairies, rare.
Taraxacum officinale Weber. Pastures, yards, etc., abundant.
Lactuca scariola L. Waste ground, rare. First collected in 1895. Will probably soon become common.
L. canadensis L. Waste ground, common.
L. floridana Gaertn. Rare. Dr. C. C. Parker, coll.
L. leucophea Gray. Rare. Dr. C. C. Parker, coll.
Sonchus oleraceus L. Waste ground, common.
S. asper Vill. Waste ground, rare or confused with the above. Dr. C. C. Parker, coll.

LOBELIACEÆ.
Lobelia cardinalis L. Along streams, rarely occurs in the western part of Fayette county.
L. syphilitica L. Low ground, common.
L. spicata Lam. Prairies, frequent.
L. spicata Lam., var. hirtella Gray. With the last, seldom observed.
L. inflata L. Open woods and borders, infrequent.
CAMPAHNULACÆ

Specularia perfoliata A. D. C. Open woods, frequent.
Campanula rotundifolia L. Rocky places, common.
C. americana L. Moist places, common.

ERICACÆ.

Chimaphila umbellata Nutt. Woods, only a dozen plants known in one place.
Pyrola elliptica Nutt. Woods, common.
Monotropa uniflora L. Woods, rare.

PRIMULACÆ.

Dodecatheon media L. Prairies, common.
Steironema ciliatum Raf. Low ground, common.
S. lanceolatum Gray. Low ground, common.
S. longifolium Gray. Low ground, common.
Lysimachia stricta Ait. Low ground, rare.
L. thyrsiflora L. Swamps, rare.

OLEACÆ.

Fraxinus americana L. Woods, infrequent.
F. viridis Michx. Low woods, apparently rare.
F. quadrangalata Michx. A single tree known to me.

APOCYNACÆ.

Apocynum androsaemifolium L. Borders of woods, common.
A. cannabinum L. Moist ground, common.

ASCLEPIDACÆ.

Asclepias tuberosa L. Prairies, common.
A. incarnata L. Low ground, common.
A. cornuti Decaisne. Waste ground, common.
A. sullivantii Engelm. Low ground, frequent.
A. phytolaccoides Pursh. Low ground, rare.
A. ovalifolia Decaisne. Prairies, rare. Dr. C. C. Parker, coll.
A. verticillata L. Prairies, infrequent.
Acerates longifolia Ell. Prairies, infrequent.
A. viridiflora Ell., var. lanceolata Gray. Prairies, rare.

GENTIANACÆ.

Gentiana crinita Froel. Rare. Dr. C. C. Parker, coll., who assures me that the plant was common ten years ago. Mr. J R. Gardner collected it in 1896.
G. quinqueflora Lam., var. occidentalis Gray. Borders of woods, becoming common.

G. puberula Michx. Dry prairies, rare.
G. andrewsii Griseb. Low prairies, infrequent.
G. alba Muhl. Low ground, rare.

POLEMONIACEÆ.

Phlox paniculata L. Rare and probably escaped. Mr. J. R. Gardner, coll.
P. maculata L. Low ground, infrequent.
P. pilosa L. Low prairies, common.
P. divaricata L. Woods, common.
P. subulata L. In cemetery, probably escaped.
Polemonium reptans L. Woods, abundant.

HYDROPHYLLACEÆ.

Hydrophyllum virginicum L. Woods, abundant.
H. appendiculatum Michx. Low woods, rare.
Ellisia nyctelea L. Moist, shady ground, common.

BORRAGINACEÆ.

Echinospermum virginicum Lehm. Woods, common.
E. lappula Lehm. Waste ground, common.
Mertensia virginica (L.) D. C. Woods, abundant.
Lithospermum officinale L. Border of woods, one patch known. Not previously reported in Iowa.
L. latifolium Michx. Rare, Dr. C. C. Parker, coll.
L. hirtum Lehm. Prairies, infrequent.
L. canescens Lehm. Prairies, common.
L. angustifolium Michx. High prairies, common. The form formerly considered a distinct species under the name of L. longiflorum Spreng, occurs commonly on hillsides and is quite distinct.

Onosmodium carolinianum A. D. C., var. molle (Michx.) Gray. Waste ground, common.

CONVOLVULACEÆ.

Ipomoea coccinea L. Rarely escaped.
I. purpurea Lam. Frequently escaped.
Convolulus sepium L. Low ground, frequent.
C. arvensis L. In yards, rare.
Cuscuta inflexa Engelm. On various plants, infrequent.
C. tenuiflora Engelm. On willows in low ground, frequent.
C. glomerata Choisy. Low ground, probably rare. Mr. J. R. Gardner, coll.
SO\NACEAE.

*Solanum triflorum* Nutt. A single plant collected along the Volga river in 1895. Not before reported in Iowa.

*S. nigrum* L. Low ground, common.

*S. heterodoxum* Danal. Growing along a street in Fayette. Doubtless introduced. Not before reported in Iowa.

*Physalis philadelphica* L. A single plant collected in a field in 1896.

*P. pubescens* L. Waste ground, common.

*P. virginiana* Mill. Waste ground, frequent.

*P. lanceolata* Michx. Waste ground, infrequent.

*Datura stramonium* L. Waste ground, infrequent.

*D. tatula* L. Waste ground, infrequent.

SCROPHULARIACEAE.

*Verbascum thapsus* L. Waste ground, frequent.

*Linaria vulgaris* Mill. Waste ground, infrequent.

*Scrophularia nodosa* L. var. *marilandica* Gray. Low prairies, common.

*Chelone glabra* L. Wet ground, frequent.

*Mimulus ringens* L. Wet ground, common.

*Conobea multifida* Benth. A single plant collected in 1894. Reported by J. C. Arthur from Lee county.

*Gratiola virginiana* L. Low ground, frequent.

*Ilysanthes riparia* Raf. Wet ground, common.

*Synthyris houghtonianana* Benth. Prairies, rare. Dr. C. C. Parker, coll.

*Veronica virginica* L. Woods and prairies, common.

*V. anagallis* L. About springs, infrequent.

*V. peregrina* L. Low waste ground, common.

*Gerardia auriculata* Michx. Low prairies, infrequent.

*G. purpurea* L. Low ground, common.

*G. tenuifolia* Vahl. Dry prairies, rare.

*Castilleia coccinea* Spreng. Woods and prairies, common.

Flowers commonly yellow on the prairies.

*C. sessiliflora* Pursh. High prairies, infrequent.

*Pedicularis canadensis* L. Prairies and open woods, common.

*P. lanceolata* Michx. Moist woods, infrequent.

LENTIBULARIACEAE.

*Utricularia vulgaris* L. Ponds, infrequent.
VERBENIACEÆ.

Verbena urticaefolia L. Low ground, common.
V. hastata L. Low ground, common.
V. stricta Vent. Prairies, frequent.
V. bracteosa Michx. Waste ground, common.
Phryma leptostachya L. Low woods, frequent.

LABIATÆ.

Isanthus caeruleus Michx. Dry hills, frequent.
Teucrium canadense L. Moist ground, abundant.
Mentha canadensis L. Moist ground, abundant.
Lycopus virginicus L. Moist ground, common.
L. sinuatus Ell. Moist ground, common.
Pycnanthemum lanceolatum Pursh. Prairies, infrequent.
Hedeoma pulegioides Pers. Dry hills, rare.
H. hispida Pursh. Dry ground, common.
Salvia lanceolata Willd. Specimen collected in 1894, but lost.
S. officinalis L. Persisting after cultivation.
Monarda fistulosa L. Prairies and woods, common.
Blephilia hirsuta Benth. Moist woods, infrequent.
Nepeta cataria L. Waste ground, common.
N. glechoma Benth. Yards, etc., common.
S. versicolor Nutt. River banks, infrequent.
Scutellaria lateriflora L. River banks, frequent.
S. parvula Michx. High prairies, frequent.
S. galericulata L. Wet shady ground, rare.
Brunella vulgaris L. Open woods and waste ground, common.

Physostegia virginiana Benth. Low ground, common.
Marrubium vulgare L. Probably escaped, rare. Dr. C. C. Parker, coll. Mr. R. B. Wylie also collected it in Jackson county in 1896. Not before reported in Iowa.
Leomurus cardiaca L. Yards, etc., frequent.
Stachys palustris L. Wet ground. Dr. C. C. Parker, coll.
S. aspera Michx. Wet ground. Dr. C. C. Parker, coll.
S. aspera Michx., var. glabra Gray. Wet ground. Dr. C. C. Parker, coll. Probably all three species of the genus are rare.
PLANTAGINACEÆ.

*Plantago major* L. Waste ground, common.

*P. rugelii* Decaisne. Waste ground, frequent.

*P. lanceolata* L. Yards, rare. Miss Gem E. Rounds, coll.


NYCTAGINACEÆ.

*Oxybaphus nyctagineus* Sweet. Sandy river banks, frequent.

AMARANTACEÆ.

*Amaranthus albus* L. Waste ground, common.

*A. blitoides* Watson. Waste ground, frequent.

*A. retroflexus* L. Cultivated fields, etc., frequent.

*Acnida tuberculata* Moq. Low waste ground, frequent.

CHENOPODIACEÆ.

*Chenopodium boscianum* Mcq. Waste ground, frequent.

*C. album* L. Waste ground, common.

*C. hybridum* L. Cultivated fields and waste ground, frequent.

*C. bonus-henricus* L. (?) Waste ground, rare. Specimen immature, carefully compared.

*C. botrys* L. Sandy river banks, rare.

*Salsola kali* L., var. *tragus* D. C. Introduced along the railroad. One specimen collected in 1895 and another in 1896. Likely to become common in a few years.

POLYGONACEÆ.

*Rumex patientia* L. A single patch known. Found in 1894 by Dr. C. C. Parker and the writer. New to Iowa. Determined by Mr. John K. Small.

*R. altissimus* Wood. Moist ground, frequent. *R. salicifolius* Weinmann may occur here also. The above determined by Mr. John K. Small.

*R. verticillatus* L. Swamps, rare.

*R. crispus* L. Waste ground, etc., common.

*R. acetosella* L. Waste ground, common.

*Polygonum aviculare* L Waste ground, abundant.

*P. erectum* L. Waste ground, common.

*P. ramosissimum* Michx. Moist, sandy ground, frequent.
P. lapathifolium L. Wet ground, frequent.
P. pennsylvanicum L. Moist ground, common.
P. muhlenbergii Watson. Swamps, rare.
P. orientale L. Escaped. Dr. C. C. Parker, coll.
P. persicaria L. Waste ground, frequent.
P. hydropiperoides Michx. Wet ground, infrequent.
P. hydropiper L. Moist ground, infrequent.
P. acre H B K Wet ground, common.
P. virginianum L. Rich woods, common.
P. sagittatum L. Moist ground, frequent.
P. convolvulus L. Waste ground and fields, common.

Fagopyrum esculentum Moench. Occasionally escaped.

ARISTOLOCHIACEÆ.

Asarum canadense L. Wooded hillsides, frequent.

THYMELÆACEÆ.

Dirca palustris L. Dry prairies, common.

SANTALACEÆ.

Comandra umbellata Nutt.

EUPHORBIACEÆ.

E. maculata L. Waste ground, common and variable.
E. prestii Guss. Waste ground, infrequent.
E. corollata L. Prairies and open woods, common.
E. heterophylla L. Rocky river banks, rare.
E. cyparissias L. Rarely escaped.
Acolypha virginica L. Waste ground, common.

URTICACEÆ.

Ulmus fulva Michx. Woods, frequent.
U. americana L. Low woods along streams, frequent.
U. racemosa Thomas. Several trees known in one place in low woods.
Celtis occidentalis L. Open woods along the Volga river, infrequent.

Cannabis sativa L. Waste ground, frequent.
Humulus lupulus L. Open woods, infrequent.
Urtica gracilis Ait. Moist ground, frequent.
Laportea canadensis Gaudichaud. Low moist woods, common.

Pil'a pumila Gray. Low woods, frequent.

Baehmeria cy'indrica Willd. Low woods, frequent.

JUGLANDACEÆ.

Juglans cinerea L. Woods, frequent.

J. nigra L. Woods, frequent.

Carya alba Nutt. Woods, infrequent here, but common along streams in Bremer county.

C. amara Nutt. Woods, frequent.

CUPULIFERÆ.


B. nigra L. Woods, frequent on the Turkey river.

Corylus americana Walt. Thickets and open woods, common.

Ostrya virginica Willd. Woods, frequent.

Carpinus caroliniana Walter. Woods, along streams, frequent.

Quercus alba L. Woods, frequent ten miles northeast of Fayette.

Q. macrocarpa Michx. Woods, common.

Q. muhlenbergii Engelm. Woods on the Turkey river, infrequent.

Q. rubra L. Woods, frequent twelve miles northeast of Fayette.


SALICACEÆ.

Salix nigra Marsh. Along streams, frequent.

S. amygdaloides Anders. Low ground, frequent.

S. lucida Muhl. Low ground, frequent.

S. fragilis L., X. alba L. Low ground, rare and probably introduced and escaped. Not before reported in Iowa.

S. longifolia Muhl. Low ground, common.

S. rostrata Richardson. Low prairies, infrequent.

S. discolor Muhl., var. prinoides Anders. Low ground, common. Perhaps not the variety.

S. humilis Marsh. Prairies, frequent.

S. sericea Marsh. Low ground, frequent. Mr. Bebb expressed surprise at finding this here, especially a "pure form," which he said replaces S. petiolaris Smith.
S. sericea Marsh, X. cordata Muhl. Low ground, apparently frequent. S. sericea with serrate leaves. Not before reported in Iowa.

S. cordata Muhl. Low ground, rare.

S. cordata Muhl., X. sericea Marsh. Low ground. Not before reported in Iowa. Mr. Bebb wrote that S. myricoides Muhl. is a synonym. Leaves nearly entire and a different plant from the second above.

Populus tremuloides Michx. Woods, common.
P. grandidentata Michx. Woods, common.
P. monilifera Ait. Frequently coming up from seeds of planted trees. Dr. C. C. Parker feels sure that it occurs along our streams. If so, I have failed to notice it.

CERATOPHYLLACEÆ.

Ceratophyllum demersum L. Ponds infrequent.

CONIFERÆ.

Pinus strobus L. Woods, occasionally seen about Wadena.
Juniperus communis L. Wooded hills along streams, common.
J. virginiana L. At top of wooded bluffs, frequent.
Taxus canadensis Willd. At the base of wooded bluffs, frequent.

HYDROCHARIDACEÆ.

Elodea canadensis Michx. Ponds, infrequent.
Vallisneria spiralis L. In Volga river, rare.

ORCHIDACEÆ.

Aplectrum hiemale Nutt. Woods, frequent.
Calopogon pulchellus R. Br. Prairies at Wadena, rare.
Pogonnia pendula Lindl. Rich woods, rooting in decayed wood and blooming in August or September, rare.
Orchis spectabilis L. Woods, frequent.
H. leucophcea Gray. Woods, rare. Dr. C. C. Parker, coll.

*Cypripedium candidum* Muhl. Low prairies, rare.
*C. pubescens* Willd. Woods, infrequent.
*C. spectabile* Salisb. Low woods and prairies, rare.

**IRIDACEÆ.**

*Iris versicolor* L. Wet prairies about ponds, frequent.
*Sisyrinchium angustifolium* Mill. Low prairies, common.

**AMARYLLIDACEÆ.**

*Hypoxis erecta* L. Prairies, common.

**DIOSCOREACEÆ.**

*Dioscorea villosa* L. A single plant was collected in 1894 along border of woods.

**LILIACEÆ.**

*S. hispida* Muhl. Moist woods, infrequent.
*Allium tricoccum* Ait, woods, frequent.
*A. canadense* Kalm. Moist river banks, frequent.
*Polygonatum biflorum* Ell. A single plant collected along a wooded hillside.
*P. giganteum* Dietrich. Low open woods, infrequent.
*Asparagus officinalis* L. Occasionally escaped.
*Smilacina racemosa* Desf. Woods, common.
*S. stellata* Desf. Low prairies, infrequent.
*Mianthemum canadense* Desf. Upland woods, frequent.
*Uvularia grandiflora* Smith. Woods, frequent.
*Erythronium albidum* Nutt. Woods, common.
*Lilium philadelphicum* L. Low prairies, frequent.
*L. canadense* L. Low prairies, frequent.
*Trillium erectum* L. Low woods, common. The form called *T. erectum* L., var. *declinatum* Gray, occurs here and is mistaken locally for *T. recurvatum* Beck.
*T. cernuum* L. Low woods, infrequent.
T. nivale Riddell. Several plants were collected in 1895 by Miss Etna Burrette.

**XYRIDACEÆ.**

*Xyris flexuosa* Muhl. Low prairies, apparently rare.

**COMMELINACEÆ.**

*Tradescantia virginica* L. Low prairies, common. Flowers frequently rose-colored or nearly white.

**JUNCACEÆ.**

*Juncus tenuis* Willd. Prairies, woods and pastures, abundant.

*J. nodosus* L. Low, sandy ground, common.

**TYPHACEÆ.**

*Typha latifolia* L. Sloughs, common.

*Sparganium eurycarpum* Engelm. Swamps, infrequent.

*S. simplex* Huds. Swamps, infrequent.

**ARACEÆ.**


*A. dracontium* Schott. Low woods, infrequent.

*Symlocarpus foetidus* Salisb. One patch known near Wadena on wet ground. Apparently a rare Iowa plant.

*Acorus calamus* L. Swamps, frequent.

**LEMNACEÆ.**

*Spirodela polyrrhiza* Schleid. Ponds, abundant.

*Lemma trisulca* L. Ponds, infrequent.

*L. minor* L. Ponds, common.

**ALISMACEÆ.**

*Alisma plantago* L. Ponds, common.

*Sagittaria heterophylla* Pursh. Wet ground or in water, common and very variable. Mr. Cratty writes of the specimens sent him, "What a maze of forms."

*S. variabilis* Engelm. Wet ground or in water, probably infrequent. For the sake of uniformity I have followed Gray in synonymy here instead of Mr. Cratty’s paper, Bull. Lab. of Nat. Hist., State University of Iowa 3: 136, F. 1896, though the latter doubtless offers many improvements. The same is true of all the aquatic plants.
NAIADACEÆ.

Potamogeton pennsylvanicus Cham. In water, frequent.
P. fluviatilis Roth. In streams, frequent.
P. mucronatus Schrad. In still water, frequent. Mr. Cratty writes, "probably this, but too imperfect for correct determination."

CYPERACEÆ.

Cyperus diandrus Torr. Low sandy ground, frequent.
C. diandrus Torr., var. castaneus Torr. With the last, probably rare.
C. aristatus Rotb. Low sandy ground, common.
C. schweinitzii Torr. Sandy ground, frequent.
C. filiculmis Vahl. Sandy soil, infrequent.
C. esculentus L. Low ground and cultivated fields, frequent.
C. strigosus L. Low, sandy ground, frequent.
Eleocharis ovata R. Br. Wet ground, infrequent.
E. palustris R. Br. Wet ground, abundant.
E. acicularis R. Br. Wet ground, abundant.
Scirpus lacustris L. Swamps, common.
S. atrovirens Muhl. Wet ground, common.
Eriophorum cyperinum L. Low ground, frequent.
E. polystachyon L. Wet ground, rare and variable.
Carex hugulina Muhl. Sloughs, frequent.
C. retrorsa Schwein. Miss Ona M. Rounds, coll. Determined by Mr. Cratty.
C. stricta Lam. Sloughs, common.
C. stricta Lam., var. decora Bailey. Sloughs, infrequent.
C. longirostris Torr. Low sandy ground, frequent.
C. aquatilis Wahl. Wet ground in mud or water, frequent.
The plants examined were young.
C. laxiflora Lam. Some doubt as to habit, and Mr. Cratty writes that is an unusual form of the species.
C. pedunculata Muhl. Shaded bluffs, infrequent.
C. varia Muhl. Mr. Fernald says the plant was too young to be certain.
C. pennsylvanica Lam. Woods and prairies, common.
C. stipata Muhl. Wet ground, common.
C. vulpinoidea Michx. Miss Ona M. Rounds, coll. Determined by Mr. Cratty.
C. rosea Schkuhr. Woods, common.
Probably common. Probably confused formerly in Iowa as some form of C. echinata Murray. Not before reported from Iowa.

C. cephalophora Muhl. Mr. A. S. Skinner, coll. Determined by Mr. Cratty,
C. tribuloides Wahl. Wet ground, frequent.
C. tribuloides Wahl., var. reducta Bailey. Wet ground, probably frequent.
C. tribuloides Wahl., var. bebbii Bailey. Mr. A. S. Skinner, coll. Determined by Mr. Cratty, who also saw the other two forms of the species.

C. scoparia Schkuhr. Low ground, frequent.
C. straminea Willd. Low ground, frequent.

GRAMINEÆ.

Spartina cynosuroides Willd. Low prairies, common.
Panicum glabrum Gaudin. Waste ground, frequent.
P. sanguinale L. Cultivated and waste ground, common.
P. proliferum Lam. Waste ground, infrequent.
P. capillare L. Waste and cultivated ground, common.
P. virgatum L. Low prairies, infrequent.
P. latifolium L. Woods, frequent.
P. dichotomum L. Woods and waste ground, common.
P. crus-galli L. Waste ground, common.
Setaria glauca Beauv. Cultivated and waste ground, abundant.
S. viridis Beauv. Cultivated and waste ground, abundant.
S. italic a Kunth. Frequently escaped.
Cenchrus tribuloides L. Sandy soil, common.
Leersia virginica Willd. Wet ground, frequent.
L. oryzoides Swartz. Wet ground, frequent.
Zizania aquatica L. Ponds, infrequent.
Andropogon furcatus Muhl. Prairies, common.
A. scoparius Michx. High prairies, frequent.
Chrysopogon nutans Benth. Prairies, frequent.
Phalaris arundinacea L. Wet ground, infrequent.
Stipa spartea Trin. High prairies, infrequent.
Oryzopsis melanocarpa Muhl. Rocky woods, infrequent.
Muhlenbergia glomerata Trin. Low ground, common.
M. mexicana Trin. Low ground, frequent.
M. sylvatica Gray. Woods, frequent.
M. diffusa Schreber. Woods, infrequent.
Brachyelytrum aristatum Beauv. Rocky woods, frequent.
Alopecurus geniculatus L., var. aristulatus Torr. Swamps, infrequent.

Sporobolus heterolepis Gray. Dry ground, frequent.


Waste grounds and probably prairies, frequent. Not before reported in Iowa, but confused with S. vaginflorus Vasey. Determined by George V. Nash.

Phleum pratense L. Commonly escaped.

Agrostis alba L. Meadows and roadsides, common.

A. alba L., var. vulgaris Thurb. Probably common as the last.

A. scabra Willd. Dry ground.

Cinna arundinacea L. Moist, wooded ravines, frequent.

Calamagrostis canadensis Beauv. Wet prairies, frequent.

Bouteloua hirsuta Lag. Sandy ground, rare. Mr. A. S. Skinner, Coll.

B. racemosa Lag. Dry prairies, common.

Phragmites communis Trin. Wet ground, rare.

Klereria cristata Pers. Prairies, common.

Eragrostis reptans Nees. Sandy river banks, common.

E. major Host. Waste ground, common.

E. frankii Meyer. Sandy river banks, infrequent.

E. petinacea Gray. Sandy river banks, infrequent.

Melica nutica Walt. Open woods, rare.

Dactylis glomerata L. Yards, rare.

Poa pratensis L. Meadows and roadsides, common.

Glyceria nervata Trin. Low ground, common.

Festuca nutans Willd. Woods, frequent.

Bromus kalmii Gray. Dry ground, infrequent.

B. ciliatus L. Woods, common.


Agropyrum repens Beauv. Waste ground, infrequent.

Hordeum jubatum L. Waste ground common.

Elymus virginicus L. River banks, abundant.

E. canadensis L. River banks and waste ground, common.

E. striatus Willd. Woods, common.

Asprella hystrix Willd. Woods, common.