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The Flora of Iowa County

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The Flora of Iowa County

By Nathan W. Easterly

Introduction

Iowa County has not been neglected botanically although there has never been a complete survey of the flora of the county. Because of the energetic travels of the late Professor B. Shimek, over 300 specimens from Iowa County are included in the permanent collections in the herbarium at the State University of Iowa. Dr. Shimek has also made numerous reports of plants from Iowa County which have been used in this thesis. The first list of plants published as a flora of Iowa County was prepared by William Moerschal and Conrad Schadt, pharmacists, Amana. This list is found at the end of Stookey's "Geology of Iowa County" (31). Since then, many reports concerning the flora of the county have been made. The present study was conducted mainly throughout the growing season of 1950. Including the author's collections together with the reports of plants that have been collected or observed by other workers, this work constitutes a preliminary list of the plants that grow in Iowa County, Iowa.

PLANT COMMUNITIES OF THE COUNTY

Although most of Iowa County is now under cultivation and the original plant cover has been obliterated in most cases, several different plant communities are still represented in very limited areas, mostly in the northern part of the county. The Amana Woods, one mile south of Amana on both sides of Route 149, are still largely unchanged by man due to careful management by the Amana Society. The higher knolls in the woods support an upland woods community, the slopes, a moister and richer woodland community. Upland woods are well represented also by the timber north of Middle Amana. A flood plain community may be observed along the Iowa River, which flows through the northern part of the county; and, also, as badly grazed patches along the North English River in the southern part of the county. Prairie relicts may still be seen between the railroad and Route 6 one mile west of Homestead, and again between Marengo and Ladora. The rest of the prairie that must have been so prominent in older times has been given over to cultivation. Aquatic vegetation is rather limited. Two wide ditches, located along Route 6 between Marengo

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and Ladora, produced *Potamogeton diversifolius* and several other aquatics; and a large shallow pond near Amana is filled with lotus, *Nelumbo lutea*, and little else. Dutch Lake, near the Amana Woods, and other cut-off ox-bow lakes along the Iowa River, are largely devoid of vascular aquatics. Sand plants are limited to a few sandy knolls south of the Iowa River. Weeds, on the other hand, are abundant everywhere along the railroads and roads, in the several towns, and in the cultivated or pastured fields.

Annotated List of Plants

FAMILY 1. EQUISETACEAE

Equisetum arvense L. Field Horsetail. Common. Sterile meadows, railroad enbankments.

Equisetum hyemale L. Tall Scouring Rush. Infrequent. Bottomland along Iowa River.

Equisetum kansanum Schaffn. Common. Railroad enbankments, moist ditches along highways.

Equisetum sylvaticum L. Woodland Horsetail. Infrequent. Wooded slopes south of Amana.

FAMILY 2. LYCOPODIACEAE

Lycopodium complanatum L. Ground Pine. Rare. On slope of ravine in rich woods south of Amana.

Lycopodium lucidulum Michx. Shining Club-moss. Rare. Rich cool woods between Homestead and Amana.

FAMILY 5. OPHIOGLOSSACEAE

Botrychium dissectum Spreng. Grape Fern. Rare. Bottomland one mile south of Amana.

Botrychium virginianum (L.) Sw. Rattlesnake Fern. Frequent. Rich woods south of Amana.

FAMILY 9. POLYPODIACEAE

Adiantum pedatum L. Maiden-hair Fern. Common. Rich woods.

Asplenium platyneuron (L.)Oakes. Ebony Spleenwort. Rare. Specimen in S.U.I. herbarium. Collected by B. Shimek in woods south of Amana.

Athyrium filix-femina (L.) Roth. Lady Fern. Common. Rich woods.

Cystopteris fragilis (L.) Bernh. Fragile Fern. Common. Rich woods.

Dryopteris spinulosa (Muell.) Watt. Toothed Wood Fern. Frequent. Rich woods.

Polystichum acrostichoides (Michx.) Schott. Christmas Fern. Rare. Rich wooded slope south of Amana.

Pteretis pensylvanica (Willd.) Fern. Ostrich Fern. Rare. Rich, bottomland woods south of Amana.

Pteridium aquilinum (L.) Kuhn var. latiusculum (Desv.)Underw. Bracken Fern. Frequent. Dry sterile woods.

Onoclea sensibilis L. Sensitive Fern. Frequent. Moist woods.

Woodsia obtusa (Spreng.) Torr. Large Woodsia. Rare. Specimen in S.U.I. herbarium. Collected by B. Shimek in woods south of Amana.

FAMILY 13. PINACEAE

Juniperus virginiana L. Red Cedar. Rare. Dry open woods.

FAMILY 14. TYPHACEAE

Typha latifolia L. Common cat-tail. Common. Moist ditches and shallow ponds.

FAMILY 15. SPARGANIACEAE

Sparganium eurycarpum Engelm. Bur-reed. Infrequent. Reported from B. Shimek's field notes.

Family 16. Zosteraceae

Potamogeton diversifolius Raf. Pondweed. Common in old pond along Route 6 one mile east of Ladora.

Potamogeton pectinatus L. Sago. Infrequent. Large shallow lotus pond west of Amana.

FAMILY 19. ALISMACEAE

Alisma subcordatum Raf. Mud Plaintain. Frequent. Aquatic habits. Sagittaria latifolia Willd. Arrowhead. Common. Shallow ponds, moist ground.

Family 21. Hydrocharitaceae

Elodea canadensis Michx. Waterweed. Reported by B. Shimek in his field notes. Aquatic habitat.

FAMILY 22. GRAMINEAE

Agropyron repens (L.) Beauv. Witch Grass. Common. Along roads and rail-road enbankments.

Agropyron smithii Rydb. Bluestem. Frequent. Dry prairie soil.

Agrostis alba L. Redtop. Common. Fields and meadows.

Agrostis alba L. var. palustris (Huds.)Pers. Carpet Bent Grass. Infrequent. Damp places along dirt roads.

Agrostis hyemalis (Walt.) BSP. Tickle Grass. Frequent. Fields, meadows, along railroads.

Agrostis perennans (Walt.) Tuckerm. Upland Bent. Infrequent. Upland woods south of Amana.

Alopecurus geniculatus L. Marsh Foxtail. Rare. In bog on slope above Dutch Lake south of Amana. Introduced.

Andropogon gerardi Vitman. Beard Grass. Common. Prairies, along highways and railroads.

Andropogon scoparius Michx. Small Bluestem. Frequent. Dry clearings, prairies.

Aristida basiramia Engelm. Specimen in S.U.I. herbarium. Collected in sandy prairie.

Avena sativa L. Oat. Escaped cultivation along roads at Homestead.

Bouteloua curtipendula (Michx.) Torr. Grama Oats. Reported from B. Shimek's field notes.

Brachyelytrum erectum (Schreb.) Beauv. Frequent. Open woods.

Bromus inermus leyss. Hungarian Brome. Frequent. Roadsides, fields. Introduced.

Bromus japonicus Thumb. Frequent. Roadsides and waste places. Introduced. Bromus latiglumis (Shear.) Hitchc. Brome. Infrequent. Rich woods and thickets.

Bromus purgans L. Canada Brome. Frequent. Rich woods and thickets.

Bromus tectorum L. Cheat. Frequent Roadsides, waste places. Introduced.

Calamagrostis canadensis (Michx.) Nutt. Blue-joint. Common. Moist places, wet meadows.

Cenchrus pauciflorus Benth. Sandbur. Frequent. Sand areas.

Cinna arundinacea L. Wood Reed. Frequent. Moist open woods.

Diarrhena americana Beauv. Rare. Found in cow pasture along North English River.

Digitaria sanquinalis (L.) Scop. Crab Grass. Common. Sandy places, along roadsides. Introduced.

Digitaria ischaemum (Schreb.) Muhl. Small Crab Grass. Frequent. Roadsides, waste places. Introduced.

Echinochloa crusgalli (L.)Beauv. Barnyard Grass. Common. Fields and waste places. Introduced.

Elymus canadensis L. Wild Rye. Common. Dry soil along roads and rail-roads.

Elymus villosus Muhl. Slender Wild Rye. Infrequent. Upland woods.

Elymus virginicus L. Terrell Grass. Infrequent. Open woods between Homestead and Amana.

Eragrostis frankii C.A.Mey. Love Grass. Infrequent. Along Iowa River north of South Amana.

Eragrostis hypnoides (Lam.)BSP. Frequent. Moist, sandy shore along Iowa River.

Eragrostis megastachya (Koel.)Link. Stink Grass. Frequent. Roadsides and waste places. Introduced.

Eragrostis pectinacea (Michx.) Nees. Infrequent. Moist places along Iowa River north of South Amana.

Eragrostis spectabilis (Pursh.) Steud. Tumble Grass. Frequent. Along roads and railroads.

Festuca elatior L. Meadow Fescue. Infrequent. Meadows and roadsides. Introduced.

Festuca obtusa Biehler. Nodding Fescue. Frequent. Moist rich woods.

Glyceria striata (Lam.) Hitchc. Fowl Meadow Grass. Frequent. Moist open woods, meadows.

Hierochloe odorata (L.) Beauv. Holy Grass. Specimen in S.U.I. herbarium. Collected in boggy places near Homestead by B. Shimek.

Hordeum jubatum L. Squirrel-tail Grass. Common. Fields and meadows.

Hystrix patula Moench. Bottle Brush Grass. Frequent. Rich Woods.

Koeleria cristata (L.)Pers. June Grass. Rare. Dry, sandy prairie west of Homestead.

Leersia oryzoides (L.) Sw. Rice Cut-grass. Infrequent. Moist ditches near Homestead.

Leptoloma cognatum (Schultes) Chase. Fall Witch-grass. Infrequent. Dry sandy places.

Muhlenbergia frondosa (Poir.) Fern. Infrequent. Damp clearings along Iowa River.

Muhlenbergia sobolifera (Muhl.) Trin. Infrequent. Sandy area along road east of Homestead.

Oryzopsis racemosa (Sm.)Ricker. Mountain Rice. Rare. Rich woods between Homestead and Amana.

Panicum capillare L. Witch Grass. Common. Sandy soil along Iowa River. Panicum dichotomiflorum Michx. Frequent. Along Iowa River.

Panicum lanuginosum Ell. var. implicatum (Schrab.) Fern. Infrequent. Dry open soil.

Panicum lanuginosum Ell. var fasciculatum (Torr.) Fern. Common. Dry open soil, pastures.

Panicum latifolium L. Frequent. Rich woods.

Panicum oligosanthes Schultes var. scribnerianum (Nash) Fern. Frequent.
Dry woods and prairies.

Panicum virgatum L. Switchgrass. Frequent. Dry sandy soils.

Paspalum ciliatifolium Michx. var. stramineum (Nash) Fern. Frequent. Sandy bank along road east of Homestead.

Phalaris arundinacea L. Reed Canary Grass. Infrequent. Growing in shallow water between Marengo and Ladora.

Phleum pratense L. Timothy. Common. Fields, roadsides. Introduced.

Poa compressa L. Canada Bluegrass. Infrequent. Dry soil. Introduced.

Poa pratensis L. Kentucky Bluegrass. Common. Fields, along roads, open woods.

Setaria faberii Herrm. Infrequent. Border of woods between Homestead and Amana. Introduced.

Setaria glauca (L.) Beauv. Yellow Foxtail. Common. Waste places, roadsides. Introduced.

Setaria italica (L.)Beauv. Hungarian Millet. Infrequent. Specimen in S.U.I. herbarium from alluvial ground near Amana. Introduced.

Setaria viridis (L.)Beauv. Green Foxtail. Common. Along roads, railroads, waste places. Introduced.

Setaria verticillata (L.) Beauv. Reported in B. Shimek's field notes. Introduced.

Sorghastrum nutans (L.) Nash. Indian Grass. Specimen in S.U.I. herbarium from a prairie opening north of Homestead. Collected by B. Shimek.

Spartina pectinata Link. Fresh Water Cord Grass. Frequent. Along moist river banks, marshy areas.

Sphenopholis intermedia Rydb. Specimen in S.U.I. herbarium. Railroad enbankment near Marengo.

Sphenopholis obtusata (Michx) Scribn. Rare. Upland woods between Homestead and Amana.

Sporobolus cryptandrus (Torr.) Gray Sand Drop Seed. Specimen in S.U.I. Herbarium from prairie area.

Sporobolus heterolepis Gray Northern Drop Seed. Specimen in S.U.I. Herbarium from prairie.

Stipa spartea Trin. Porcupine Grass. Common locally. Prairie strip west of Homestead, and west of Marengo.

Zizania aquatica L. Wild Rice. Reported from B. Shimek's field notes.

FAMILY 23. CYPERACEAE

Bulbostyles capillaris (L.) Clarke. Reported from B. Shimek's field notes.

Cyperus acuminatus Torr. and Hook. Reported from B. Shimek's field notes.

Cyperus diandrus Torr. Reported from B. Shinek's field notes.

Cyperus erythrorhizos Muhl. Reported from B. Shimek's field notes.

Cyperus esculentus L. Yellow Nut Grass. Specimen in S.U.I. herbarium. Old dune east of Homestead.

Cyperus filiculmis Vahl. Frequent. Sandy areas, dry soil.

Cyperus inflexus Muhl. Reported from B. Shimek's field notes.

Cyperus rivularis Kunth. Reported from B. Shimek's field notes.

Cyperus schweinitzii Torr. Local. Sandy area west of Homestead along Route 6.

Cyperus strigosus L. Galingale. Common. Moist ditches and ravines.

Eleocharis acicularis (L.)R. & S. Spike Rush. Rare. Marshy ground north of South Amana.

Eleocharis calva Torr. Specimen in S.U.I. herbarium. Alluvial soil south of Amana.

Eleocharis wolfii Gray. Reported from B. Shimek's field notes.

Scirpus atrovirens Willd. Bulrush. Common. Moist ditches and boggy places.

IOWA ACADEMY OF SCIENCE

Scirpus cyperinus (L.) Kunth. Infrequent. Wet ditch near Homestead.

Scirpus fluviatilis (Torr.) Gray River Bulrush. Reported from B. Shimek's field notes.

Scirpus validus Vahl. Great Bulrush. Rare. Boggy place one mile north of South Amana.

Carex amphibola Steud. var. turgida Fern. Frequent. Bottomland along Iowa River.

Carex annectens Bickn. var. xanthocarpa (Bickn.) Wieg, Infrequent. Along railroads and highways.

Carex atherodes Spreng. Common. Bottomlands.

Carex bebbii Olney. Frequent. Border of woods, along railroads.

Carex bicknellii Britt. Specimen in S.U.I. herbarium from alluvial ground south of Amana.

Carex blanda Dewey. Woodland Sedge. Common. Rich woods.

Carex brevior (Dewey) Mackenz. Rare. Prairie one mile west of Homestead.

Carex cephaloidea Dewey Rare. Rich woods between Homestead and Amana. Carex cephalophora Muhl. Oval-headed sedge. Common. Bottomland along Iowa River.

Carex cristatella Britt. Frequent. Low woods, bottomlands.

Carex conjuncta Boott. Frequent. Flood plain north of Marengo.

Carex crawei Dewey Reported from B. Shimek's field notes.

Carex crus-corvi Shuttlw. Reported from B. Shinek's field notes.

Carex davisii Schwein. & Torr. Common. Bottomlands along Iowa River.

Carex festucaceae Schkuhr. Infrequent. Along highways and railroads.

Carex gravida Bailey. Heavy Sedge. Frequent. Along railroads and moist ditches.

Carex grayii Carey. Common. Alluvial habitats.

Carex hystericina Muhl. Porcupine Sedge. Rare. Boggy place north of South Amana.

Carex lanuginosa Michx. Frequent. Alluvial ground east of Homestead.

Carex lupulina Muhl. Hop Sedge. Frequent. Bottomland and wet ditches.

Carex meadii Dewey Common. Prairie, along railroads.

Carex molesta Mackenz. Frequent. Prairie, dry soil.

Carex muskingumensis Schw. Rare. Bottomland along Iowa River northwest of Homestead.

Carex normalis Mackenz. Frequent. Alluvial soil.

Carex pensylvanica Lam. Common. Open woods and prairie.

Carex rosea Schkuhr. Common. Rich woods.

Carex sartwellii Dewey Reported from B. Shimek's field notes.

Carex scoparia Schkuhr. Frequent. Ditches along roads.

Carex sparganioides Muhl. Bur-reed Sedge. Frequent. Rich woods between Homestead and Amana.

Carex sprengellii Dewey Frequent. Bottomland in wooded areas south of Amana.

Carex stipata Muhl. Frequent. Around pond east of Homestead.

Carex stricta Lam. Tussock Sedge. Frequent. Moist swales and prairie.

Carex tenera Dewey Rare. Along railroad east of Homestead.

Carex tribuloides Wahlenb. Common. Bottomland along Iowa River and moist swales along railroads.

Carex typhina Michx. Infrequent. Moist ravine in woods south of Amana.

Carex vulpinoidea Michx. Fox Sedge. Common. Bottomland along Iowa River, moist prairie swales.

FAMILY 24. ARACEAE

Acorus calamus L. Sweetflag. Specimen in S.U.I. herbarium. Collected by B. Shimek in marshy area near West Amana.

Arisaema dracontium (L.) Schott. Green Dragon. Infrequent. Bottomland south of Amana.

Arisaema triphyllum (L.) Schott. Jack-in-the-pulpit. Frequent. Rich woods. Symplocarpus foetidus (L.) Nutt. Skunk Cabbage. Rare. Boggy ravine in woods north of Middle Amana.

Family 25. Lemnaceae

Lemna minor L. Duckweed. Infrequent. Growing in lotus pond west of Amana.

Wolffia punctata Griseb. Reported from B. Shimek's field notes.

FAMILY 29. COMMELINACEAE

Tradescantia bracteata Small Spiderwort. Rare. Along fence in field north of South Amana.

Tradescantia ohiensis Raf. Spiderwort. Common. Along roads and in meadows.

FAMILY 31. JUNCACEAE

Juncus interior Weig. Reported from B. Shimek's field notes.

Juncus nodosus L. Reported from B. Shimek's field notes.

Juncus torreyi Coville. Infrequent. Moist ditches along highways.

Juncus tenuis Willd. Path Rush. Common. Open woods, fields, ditches.

Family 32. Liliaceae

Allium canadense L. Wild Garlic. Frequent. Open woods, along railroads, weedy places.

Erythronium albidum Nutt. White Trout Lily. Common. Bottomland south of Amana.

Lilium michiganense Farw. Michigan Lily. Infrequent. Along railroad west of Marengo.

Lilium philadelphicum L. Wood Lily. Reported from Shimek, 1911.

Melanthium virginicum L. Bunchflower. Infrequent. Along railroad west of Marengo, alluvial soil west of Amana.

Polygonatum canaliculatum (Muhl.) Pursh. Solomon's-Seal. Common. Rich woods, borders of woods and roadsides.

Smilacina racemosa (L.) Desf. False Solomon's-Seal. Common. Moist woods. Smilacina stellata (L.) Desf. Starry False Solomon's-Seal. Frequent. Moist woods and ditches.

Smilax ecirrhata (Engelm.) Wats. Frequent. Rich woods.

Smilax herbacea L. Carrion-flower. Frequent. Rich woods.

Smilax lasioneura Hook. Common. Borders of woods, climbing over fences, flood plain.

Smilax tamnoides L. var. hispida (Muhl.) Fern. Bristly Greenbrier. Infrequent. Along rivers in fields.

Trillium flexipes Raf. Frequent. Cool, damp woods.

Trillium nivale Riddell. Snow Trillium. Reported from B. Shimek's field notes.

Trillium recurvatum Beck. Infrequent. Bottomland south of Amana.

Uvularia grandiflora Smith Large Bellwort. Frequent. Moist rich woods. Veratrum woodii Robbins False Hellebore. Reported by T. J. Fitzpatrick, (1901).

Family 34. Dioscoreaceae

Dioscorea villosa L. Yam. Frequent. Upland woods.

FAMILY 35. AMARYLLIDACEAE

Hypoxis hirsuta (L.) Coville. Yellow Star-grass. Infrequent. Prairie strip along railroads.

FAMILY 36. IRIDACEAE

Iris virginica L. var. shrevei (Small) Anders. Blue Flag. Infrequent. Moist ditch along road north of Williamsburg.

Sisyrinchium albidum Raf. Blue-eyed grass. Common. Sandy places, prairies.

Family 39. Orchidaceae

Cypripedium calceolus L. var. pubescens (Willd.) Correll. Large Yellow Lady Slipper. Infrequent. Rich woods.

Cypripedium reginae Walt. Showy Lady Slipper. Specimen in S.U.I. herbarium from deep upland woods south of Amana. Collected by B. Shimek.

Goodyera pubescens (Willd.) R. Br. Downy Rattlesnake Plaintain. Rare. Two stations in rich woods south of Amana.

Habenaria leucophaea (Nutt.) Gray Prairie White Fringed Orchis. Railway enbankment one mile west of Homestead near the prairie plot. Orchis spectabilis L. Showy Orchis. Frequent. Rich woods.

FAMILY 41. SALICACEAE

Populus deltoides Marsh. Cottonwood. Common. Riverbanks, bottomlands. Populus grandidentata Michx. Large-toothed Aspen. Frequent. woods.

Populus tremuloides Michx. Quaking Aspen. Common. Dry open woods. Salix alba L. White Willow. Reported from B. Shimek's field notes. Introduced.

Salix amygdaloides Anderss. Peach-leaved Willow. Rare. Along Iowa River north of Marengo.

Salix cordata Muhl. Infrequent. Open woods between Homestead and Amana. Salix discolor Muhl. Pussy Willow. Specimen in S.U.I. herbarium. Collected by B. Shimek along road north of Homestead.

Salix humilis Marsh. Infrequent. Prairie strip west of Homestead.

Salix interior Rowlee. Sandbar Willow. Common. Along Iowa River and smaller streams.

Salix nigra Marsh. Black Willow. Frequent. Floodplain, moist wooded areas.

FAMILY 44. JUGLANDACEAE

Carya cordiformis (Wang.) Koch. Bitternut, Pignut. Frequent. Upland woods. Carva laciniosa (Michx.) Loud. Kingnut. Infrequent. Numerous trees in bottomland south of Amana.

Carya ovata (Mill.) Koch. Shagbark Hickory. Common. Upland woods.

Juglans cinerea L. Butternut. Infrequent. Upland woods.

Juglans nigra L. Black Walnut. Common. Upland woods.

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Betula nigra L. River Birch. Common. Alluvial habitat.

Corylus americana Walt. American Hazelnut. Common. Upland woods.

Ostrya virginiana (Mill.) Koch. American Hop-hornbean. Common. Upland woods.

FAMILY 46. FAGACEAE

Quercus alba L. White Oak. Common. Upland woods.

Quercus bicolor Willd. Swamp White Oak. Infrequent. Bottomlands., marshy places.

Quercus ellipsoidalis Hill. Jack Oak. Specimen in S.U.I. herbarium. Collected by B. Shimek in upland woods northeast of Homestead.

Quercus lyrata Walt. Swamp Post Oak. Specimen in S.U.I. herbarium. Collected by B. Shinek in alluvial woods south of Amana.

Querdus macrocarpa Michx. Mossy-cup Oak. Common. Upland woods, grazed woodlots.

Quercus rubra L. Red Oak. Common. Upland woods.

Quercus velutina Lam. Black Oak. Common. Upland woods.

FAMILY 47. ULMACEAE

Celtis occidentalis L. Hackberry. Common. Bottomlands.

Ulmus americana L. American Elm. Common. Flood Plains and low woods.

Ulmus rubra Muhl. Slippery Elm. Common. Rich woods.

FAMILY 48. MORACEAE

Morus alba L. White Mulberry. Escape from cultivation along roads and rivers.

Family 49. Cannabinaceae

Cannabis sativa L. Common Hemp. Common. Along railroads and waste places. Introduced.

Humulus lupulus L. Hop. Reported from B. Shimek's field notes. Introduced.

Family 50. Urticaceae

Boehmeria cylindrica (L) Sw. Bog Hemp. Infrequent. Alluvial ground near Homestead.

Laportea canadensis (L.) Wedd. Wood Nettle. Common. Alluvial habitats. Parietaria pensylvanica Muhl. Pellitory. Frequent. Moist, shady places. Pilea pumila (L.) Gray Clearweed. Frequent. Bottomlands, low woods.

Urtica procera Muhl. Nettle. Common. Along roads and railroads.

Family 51. Santalaceae

Commandra umbellata (L.) Nutt. Bastard Toadflax. Infrequent. Sandy opening above Dutch Lake.

FAMILY 53. ARISTOLOCHIACEAE

Asarum canadense L. Wild Ginger. Common. Rich wooded slopes.

Family 54. Polygonaceae

Polygonum aviculare L. Knotweed. Common. Along roads and waste places.
Introduced.

Polygonum coccineum Muhl. Infrequent. Growing in shallow pond north of South Amana.

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Polygonum convolvulus L. Black Bindweed. Specimen in S.U.I. herbarium. Collected by B. Shinek in sandy prairie near Homestead. Introduced. Polygonum erectum L. Infrequent. Along road near Ladora. Polygonum hydropiper L. Common Smartweed. Reported from B. Shimek's

field notes.

Polygonum hydropiperoides Michx. Mild Water-pepper. Reported from B. Shimek's field notes.

Polygonum lapathifolium L. Common. Damp clearings, cultivated fields. Polygonum pensylvanicum L. Pinkweed. Common. Damp fields and along railroaods.

Polygonum persicaria L. Lady's Thumb. Frequent. Moist ditches and alluvium. Introduced.

Polygonum ramosissimum Michx. Bushy Knotweed. Infrequent. Along railroad west of Homestead.

Polygonum sagittatum L. Arrow-leaved Tearthumb. Frequent. Moist ditches. Polygonum scandens L. Climbing False Buckwheat. Common. Damp thickets, low woods.

Rumex acetosella L. Field Sorrel. Common. Sandy openings, prairies. Introduced.

Rumex altissimus Wood. Pale Dock. Common. Along roads, railroads and in fields.

Rumex crispus L. Yellow Dock. Reported from Pammel and King, "Weed Flora of Iowa". Introduced.

Rumex orbiculatus Gray Water Dock. Reported from B. Shimek's field notes. Rumex verticillatus L. Swamp Dock. Infrequent. Alluvial soil near Homestead.

Tovara virginiana (L.) Raf. Jumpseed. Frequent. Moist wooded places, low woods.

FAMILY 55. CHENOPODIACEAE

Chenopodium album L. Lamb's Quarter. Common. Along roads, railroads, waste places. Introduced.

Chenopodium glaucum L. Oak-leaved Goosefoot. Infrequent. Along road north of South Amana. Introduced.

Chenopodium boscianum Moq. Infrequent. Moist ravine north of Williamsburg.

Chenopodium leptophyllum Nutt. Infrequent. Along roads and railroads. Cycloloma atriplicifolium (Spreng.) Coult. Winged Pigweed. Local. Sandy prairie west of Homestead.

Kochia scoparia (L.) Roth. Summer Cypress. Reported from Pammel and King, "Weed Flora of Iowa". Introduced.

Family 56. Amaranthaceae

Acnida altissima Riddell. Water Hemp. Reported from B. Shimek's field notes. River banks and low ground.

Amaranthus albus L. Tumbleweed. Infrequent. Along road north of South

Amana.

Amaranthus graecizans L. Common. Along roads and in fields.

Amaranthus hybridus L. Green Amaranth. Frequent. Along Iowa River and smaller streams. Introduced.

Amaranthus retroflexus L. Rough Pigweed. Common. Along roads and waste places. Introduced.

Froelichia gracilis (Hook) Moq. Cottonweed. Local. Sandy areas near Home-

FAMILY 57. NYCTAGINACEAE

Mirabilis nyctaginea (Michx.) MacM. Four O'clock. Frequent. Along railroads and in prairies.

Family 58. Phytolaccaceae

Phytolocca americana L. Pokeweed. Reported from B. Shimek's field notes.

FAMILY 59. AIZOACEAE

Mollugo verticillata L. Carpetweed. Common. Along roadsides and waste places. Introduced.

Family 60. Portulacaceae

Claytonia virginica L. Virginia Spring Beauty, Common, Moist woods and bottomland.

Portulaca oleracea L. Common Purslane. Reported from B. Shimek's field notes. Introduced.

FAMILY 61. CARYOPHYLLACEAE

Arenaria lateriflora L. Grove Sandwort. Reported from B. Shimek's field notes

Cerastium nutans Raf. Nodding Chickweed. Frequent. Along roadsides, open woods, pastures.

Cerastium vulgatum L. Common Mouse-ear Chickweed. Infrequent. Cow pasture north of Homestead. Introduced.

Lychnis alba Mill. Evening Campion. Frequent. Roadsides, waste places.

Introduced. Saponaria officinalis L. Soapwort. Bouncing Bet. Frequent. Roadsides and waste places. Introduced.

Silene antirrhina L. Sleepy Catchfly. Common. Along railroads and waste places.

Silene nivea (Nutt.)Otth. Snowy Campion. Infrequent. Along North English River, woods north of Middle Amana.

Silene stellata (L.) Ait. f. Starry Campion. Infrequent. Along railroad near Homestead.

Stellaria longifolia Muhl. Starwort. Reported from B. Shimek's field notes. Stellaria meadia (L.) Cyrillo. Common Chickweed. Reported from B. Shimek's field notes. Introduced.

Family 62. CERATOPHYLLACEAE

Ceratophyllum demersum L. Hornwort. Reported from B. Shimek's field notes.

FAMILY 63. NYMPHAEACEAE

Nelumbo lutea (Willd.) Pers. Yellow Nelumbo. Introduced by Amana Society in pond west of Amana.

Family 64. Ranunculaceae

Actaea pachypoda Ell. White Baneberry. Infrequent. Rich woods.

Actaea rubra (Ait.) Willd. Red Baneberry. Frequent. Rich woods.

Anemone canadensis L. Meadow Anemone. Common. Moist meadows and roadsides.

Anemone cylindrica Gray Thimbleweed. Frequent. Along railroads and prairie.

Anemone quinquefolia L. American Wood Anemone. Rare. Moist woods south of Amana.

Anemone virginiana L. Tall Anemone. Frequent. Open woods.

Anemonella thalictroides (L.) Spach. Rue Anemone. Common. Upland woods. Aquilegia canadensis L. American Columbine. Frequent. Rich woods and thickets.

Caltha palustris L. Marsh Marigold. Infrequent. Boggy places in woods south of Amana.

Clematis pitcheri T. & G. Leather Flower. Frequent. Flood plain along Iowa River.

Clematis virginiana L. Virgin's Bower. Specimen in S.U.I. herbarium. Collected by B. Shimek in alluvial woods near Dutch Lake.

Delphinium virescens Nutt. var. penardi (Huth.) Perry. Larkspur. Reported from B. Shimek's field notes.

Hepatica acutiloba D. C. Hepatica. Common. Rich woods.

Ranunculus abortivus L. Small-flowered Buttercup. Common. Bottomlands. Ranunculus acris L. Tall Buttercup. Specimen in S.U.I. herbarium. Collected by B. Shimek in sandy area above Dutch Lake. Introduced.

Ranunculus fascicularis Muhl. Early Buttercup. Infrequent, Grazed wood-

lot west of South Amana.

Ranunculus flabellaris Raf. Yellow Water-buttercup. Specimen in S.U.I. herbarium. Collected by B. Shimek in alluvial pond northwest of Home-

Ranunculus sceleratus L. Cursed Crowfoot. Specimen in S.U.I. herbarium. Collected by B. Shimek in low places north of Homestead.

Ranunculus septentrionalis Poiv. Swamp Buttercup. Common. Bottomlands. Thalictrum dasycarpum Fisch. & Lall. Purple Meadow-Rue. Infrequent. Along roads and railroads.

FAMILY 65. BERBERIDACEAE

Caulophyllum thalictroides (L.)Michx. Blue Cohosh. Common. Rich woods. Podophyllum peltatum L. Mayapple. Frequent. Open woods, meadows.

FAMILY 66. MENISPERMACEAE

Menispermum canadense L. Moonseed. Common, Rich woods.

FAMILY 71. PAPAVERACEAE

Dicentra cucullaria (L.) Burnh. Dutchman's Breeches. Common. Moist rich woods.

Chelidonium majus L. Celandine. Rare. Rich woods north of Middle Amana. Introduced.

Sanguinaria canadensis L. Bloodroot, Common, Rich woods

Family 72. Capparidaceae

Polansia graveolens Raf. Clammyweed. Frequent. Railway enbankments.

Family 73. CRUCIFERAE

Armoracia lapathifolia Gilib. Horseradish. Infrequent. Moist ground along railroad east of Homestead. Introduced.

Berteroa incana (L.)D.C. Hoary Alyssum. Reported from B. Shimek's field notes. Introduced.

Barbarea vulgaris R. Br. Bitter Wintercress. Frequent. Moist ditches along roads. Introduced.

Brassica kaber (DC.) Wheeler.
field notes. Introduced. Crunchweed. Reported from B. Shimek's

Brassica nigra (L.) Koch. Black Mustard. Common. Waste places, fields. Introduced.

Capsella bursa-pastoris (L.) Medic. Shephard's Purse. Common. Along roads and in waste places.

Cardamine bulbosa (Schreb.) BSP. Bulb Bittercress. Frequent. Alluvial soil in woods, bottomlands.

Cardamine douglasii (Torr.) Britt. Northern Bittercress. Infrequent. Bottomland south of Amana.

Cardamine pensylvanica Muhl. Infrequent. Bottomland south of Amana.

Conringia orientalis (L.)Dumort. Hares-ear Mustard. Rare. Along railroad west of Marengo. Introduced.

Camelina sativa (L.)Crantz. False Flax. Infrequent. Along railroad west of

Marengo. Introduced.

Dentaria laciniata Muhl. Toothwort. Frequent. Moist woods and bottomlands. Descurainia sophia (L.) Webb. Infrequent. Along railroad and prairie. Introduced.

Draba reptans (Lam.) Fern. Reported from B. Shimek's field notes. Erysimum cheiranthoides L. Wormseed Mustard. Reported from B. Shimek's field notes. Introduced.

Iodanthus pinnatifidus (Michx.) Steud. Purple Rocket. Rare. Moist ditch in pasture northwest of Homestead.

Lepidium campestre (L.) R. Br. Cow Cress. Frequent. Roadsides, wasteplaces. Introduced.

Lepidium densiflorum Schrad. Frequent. Along railroads, waste places. Introduced.

Lepidium virginicum L. Common Peppergrass. Common. Along railroads, waste places.

Rorippa islandica (Oeder) Borbas. Yellow Cress. Common. Wet ditches, muddy places, shallow water.

Sisymbrium altissimum L. Tumble Mustard. Frequent. Along roads, railroads, prairies. Introduced.

Thlaspi arvense L. Pennycress. Common. Roadsides, waste places. Introduced.

FAMILY 79. SAXIFRAGACEAE

Heuchera richardsonii R. Br. var. grayana Rosen., Britt., & Lak. Infrequent. Prairie west of Homestead.

Penthorum sedoides L. Ditch Stonecrop. Frequent. Moist ditches. Ribes americanum Mill. Wild Black Current. Infrequent. Rich woods.

Ribes cynosbati L. Prickly Gooseberry. Common. Fields, open woods, sandy places.

Ribes missouriense Nutt. Missouri Gooseberry. Frequent. Open woods, pas-

Saxifraga pensylvanica L. Saxifrage. Frequent. Moist ravines in woods.

Family 81. Platanaceae

Platanus occidentalis L. Sycamore. Infrequent. Bottomland along Iowa River south of Amana.

Family 82. Rosaceae

Agrimonia gryposepala Wallr. Agrimony. Common. Upland woods. Agrimonia parviflora Ait. Infrequent. Near lotus pond in field west of Amana. Agrimonia rostellata Wallr. Collected once in open woods north of Middle

Amana.

Amelanchier arborea (Michx. f.) Fern. Shadbush. Common. Rich woods. Crataegus margaretta Ashe. Infrequent. Fields and pastures. Crataegus mollis (T. & G.) Scheele. Common. Open woods and bottomlands. Fragaria virginiana Duchesne. Strawberry. Common. Roadsides and fields. Geum canadense Jacq. White Avens. Common. Open woods. Geum laciniatum Murr. Infrequent. In field north of South Amana.

Potentilla argentea L. Silvery Cinquefoil. Infrequent. Along Route 149 north of Williamsburg.

Potentilla arguta Pursh. Tall Cinquefoil. Frequent. Along railroads, sandy places.

Potentilla norvegica L. Rough Cinquefoil. Frequent. Along railroads and sandy places.

Potentilla simplex Michx. Frequent. Along roads and railroads, in fields. Prunus serotina Ehrh. Black Cherry. Common. Upland woods. Prunus virginiana L. Choke Cherry. Common. Rich woods.

Pyrus ioensis (Wood) Bailey Wild Crab. Frequent. Open woods, sandy places. Pyrus malus L. Apple. Escape from cultivation along dirt roads. Introduced. Rosa arkansana Porter var. suffulta (Greene) Cockerel. Infrequent. Along dirt roads, prairie.

Rosa blanda Ait. Meadow Rose. Infrequent. Sandy area above Dutch Lake. Rosa carolina L. Pasture Rose. Common. Sandy places and prairie. Rosa woodsii Lindl. Specimen in S.U.I. herbarium. Collected by B. Shimek

on sandy prairie west of Homestead.

Rubus alleghaniensis Porter. Blackberry. Frequent. Along woodland roads. Rubus flagellaris Willd. Dewberry. Infrequent. Along woodland road in woods south of Amana.

Rubus occidentalis L. Black Raspberry. Frequent. Open woods. Spiraea alba Du Roi. Meadow Sweet. Specimen in S.U.I. herbarium. Collected by B. Shimek in a moist meadow.

FAMILY 83. LEGUMINOSAE

Amorpha canescens Pursh. Lead Plant. Infrequent. Prairie west of Homestead.

Amorpha fruticosa L. Indigo Bush. Specimen in S.U.I. herbarium. Collected by B. Shimek near Amana.

Amphicarpa bracteata (L.) Fern. Hog-peanut. Infrequent. Woods north of Middle Amana.

Apios americana Medic. Groundnut. Rare. Collected once along railroad west of Homestead.

Astragalus canadensis L. Milk Vetch. Infrequent. Prairie swales along railroads.

Baptisia leucantha T. & G. White False Indigo. Infrequent. Open woods, meadows.

Baptisia leucophaea Nutt. Cream Wild Indigo. Rare. Prairie west of Homestead.

Cassia fasciculata Michx. Prairie Senna. Common. Along roads, railroads, sandy soil.

Crotolaria sagittalis L. Rattlebox. Rare. Sandy prairie west of Homestead. Desmodium canadense (L.)DC. Tick Clover. Common. Along roads, fields. Desmodium cuspidatum (Muhl.)Loud. Rare. Upland woods north of Middle

Desmodium glutinosum (Muhl.) Wood. Tick Trefoil. Common. Dry woods. Desmodium illinoense Gray. Common. Along roads, prairies, fields. Gleditsia triacanthos L. Honey Locust. Infrequent. Flood plains.

Glycyrrhiza lepidota (Nutt.) Pursh. Wild Licorice. Reported by Shimek, (1911).

Lathyrus palustris L. Vetchling. Rare. Along railroad west of Homestead. Lespedeza capitata Michx. Bush Clover. Rare. Prairie west of Homestead. Medicago lupulina L. Black Medic. Frequent. Along roads, waste places. Introduced.

Medicago sativa L. Alfalfa. Common. Roadsides. Escaped cultivation.

Melilotus alba Desr. White Sweet Clover. Common. Roadsides and fields. Introduced.

Melilotus officinalis (L.) Lam. Yellow Sweet Clover. Common. Roadsides and fields. Introduced.

Petalostemum candidum. (Willd.) Michx. White Prairie Clover. Infrequent. Prairie west of Homestead. Petalostemum purpureum (Vent.) Rydb. Purple Prairie Clover. Frequent on

prairie west of Homestead. Psoralea psoralioides (Walt.) Cary. Sampson's Snakeroot. Reported from B.

Shimek's field notes. Strophostyles helvola (L.) Ell. Wild Bean. Common. Sandy places, prairies,

roadsides. Strophostyles leiosperma (T. & G.) Piper. Specimen in S.U.I. herbarium. Col-

lected by B. Shimek on sandy prairie. Tephrosia virginiana (L.) Pers. Goat's Rue. Specimen in S.U.I. herbarium.

Prairie borders.

Trifolium arvense L. Rabbit-foot Clover. Reported from B. Shimek's field notes. Introduced. Trifolium hybridum L. Alsike Clover. Common. Roadsides, clearings. In-

troduced. Trifolium pratense L. Red Clover. Common. Roadsides, clearings. Introduced.

Trifolium procumbens L. Low Hop-clover. Rare. Collected in school lot north of South Amana. Introduced.

Trifolium repens L. White Clover. Frequent. Roadsides, pastures.

Vicia americana Muhl. Vetch. Reported from B. Shimek's field notes.

Vicia villosa Roth. Hairy Vetch. Specimen in S.U.I. herbarium. Victor.

Introduced.

FAMILY 84. LINACEAE

Linum sulcatum Riddell. Flax. Reported by Shimek, (1911).
Linum usitatissimum L. Common Flax. Reported from B. Shimek's field notes. Introduced.

FAMILY 85. OXALIDACEAE

Oxalis europaea Jord. Common Wood Sorrel. Common. Along roads, fields, waste places.

Oxalis stricta L. Upright Yellow Wood Sorrel. Infrequent. Along railroads, pastures.

Oxalis violacea L. Violet Wood Sorrel. Frequent. Prairies and sandy places.

FAMILY 86. GERANIACEAE

Geranium maculatum L. Wild Geranium. Common. Rich woods.

FAMILY 88. RUTACEAE

Xanthoxylum americanum Mill. Northern Prickly Ash. Frequent. Rich woods.

FAMILY 91. POLYGALACEAE

Polygala incarnata L. Milkwort, Specimen in S.U.I. herbarium. Sandy prairie.

Polygala sanguinea L. Reported by Shimek, (1911).

Polygala senega L. Seneca Snakeroot. Infrequent. Prairie strip along railroad west of Marengo.

Polygala verticillata L. Reported from B. Shimek's field notes.

FAMILY 92. EUPHORBIACEAE

Acalypha rhomboidea Raf. Three-seeded Mercury. Common. Cool, moist places in woods and ditches.

Croton glandulosus L. var septentrionalis Muell. Sand Croton. Infrequent. Sandy places near Homestead.

Euphorbia corollata L. Flowering Spurge. Common. Along railroads, prairie. Euphorbia cyperissias L. Cypress Spurge. Escaped from cultivation along road near High Amana.

Euphorbia dentata Michx. Infrequent. Along railroad west of Homestead. Euphorbia maculata L. Eyebane. Common. Along roads, waste places. Euphorbia marinata Pursh. Snow-on-the-mountain. Rare. Near lotus pond west of Amana.

Euphorbia supina Raf. Milk Purslane. Common. Roadsides, waste places.

FAMILY 97. ANACARDIACEAE

Rhus glabra L. Smooth Sumac. Frequent. Prairie, sandy places. Rhus radicans L. Poison Ivy. Observed throughout county.

FAMILY 100. CELASTRACEAE

Celastrus scandens L. Climbing Bittersweet. Frequent. Rich woods. Euonymous atropurpureus Jacq. Wahoo. Frequent. Open woods and thickets.

FAMILY 101. STAPHYLEACEAE

Staphylea trifolia L. American Bladdernut. Infrequent. Rich wooded slope near Dutch Lake.

Family 102. ACERACEAE

Acer nigrum Michx. f. Black Maple. Frequent. Rich woods. Acer negundo L. Box Elder. Frequent. Riverbanks, bottomlands. Acer saccharinum L. Silver Maple. Common. Riverbanks, floodplains.

FAMILY 105. BALSAMINACEAE

Impatiens capensis Meerb. Jewelweed. Common. Moist or soggy ravines in

Impatiens pallida Nutt. Pale Touch-me-not. Common. Moist ravines and alluvial ground.

FAMILY 106. RHAMNACEAE

Ceanothus americanus L. New Jersey Tea. Frequent. Prairie, along roads, open woods.

Rhamnus lanceolata Pursh. Lance-leaved Buckthorn. Rare. Along road in Amana Woods south of Amana.

FAMILY 107. VITACEAE

Parthenocissus quinquefolia (L.) Planch. Virginia Creeper. Common. Roadsides, open woods.

Riverbank Grape. Common. Along Iowa River and Vitis riparia Michx. smaller streams.

Family 108. TILIACEAE

Tilia americana L. American Basswood. Common. Upland woods, sometimes in moist situations.

Family 109. Malvaceae

Abutilon theophrasti Medic. Indian Mallow. Common. Sandy soil, waste places. Introduced.

Althaea rosea Cav. Garden Hollyhock. Escaped from cultivation. Along Route 6 near Ladora.

Hibiscus militaris Cav. Halbred-leaved Rose Mallow. Reported by Shimek, (1948).

Malva neglecta Wallr. Mallow. Frequent. Roadsides, waste places. Introduced.

Family 111. Guttiferae

Hypericum mutilum L. Specimen in S.U.I. herbarium. Collected by B. Shimek. in a bog at Homestead.

Common Saint Johnswort. Hypericum perforatum L. Infrequent. Along roadside in sand near Homestead. Introduced.

Hypericum punctatum Lam. Spotted Saint Johnswort. Infrequent. Upland woods north of Middle Amana.

Hypericum pyramidatum Ait. Great Saint Johnswort. Reported from B. Shimek's field notes.

Hypericum sphaerocarpum Michx. Rare. Along railroad at Homestead.

FAMILY 114. CISTACEAE

Helianthemum bicknellii Fern. Frostweed. Rare. On prairie one mile west of Homestead.

FAMILY 115. VIOLACEAE

Viola fimbriatula Sm. Specimen in S.U.I. herbarium. Collected in dry woods, Viola missouriensis Greene. Common. Bottomland south of Amana.

Viola pallens (Banks) Brainerd. Specimen in S.U.I. herbarium. Collected in bog above Dutch Lake by B. Shimek.

Viola papilionacea Pursh. Butterfly Violet. Common. Damp woods, meadows, roadsides.

Viola pedata L. Birdfoot Violet. Infrequent. Sandy opening above Dutch Lake, dry hillsides.

Viola pedatifida Don. Prairie Violet. Infrequent Prairie west of Homestead. Viola pedatifida Don. x Viola papilionacea Pursh. Rare. A hybrid found on prairie along railroad west of Marengo.

Viola pensylvanica Michx. Smooth Yellow Violet. Frequent. Bottomland and moist woods.

Viola pubescens Ait. Downy Yellow Violet. Infrequent. Moist woods south of Amana.

Viola sororia Willd. Downy Blue Violet. Frequent. Rich moist woods.

FAMILY 121. LYTHRACEAE

Lythrum elatum Pursh. Common Loosestrife. Frequent. Moist ditches and bottomland.

Peplis diandra Nutt. Water Purslane. Rare. In pond along railroad east of Homestead.

FAMILY 125. ONAGRACEAE

Circaea quadrisulcata (Maxim.) French & Sav. var. canadensis (L.) Hara. Enchanter's Nightshade. Common. Rich woods.

chanter's Nightshade. Common. Rich woods.

Gaura biennis L. Gaura. Specimen in S.U.I. herbarium. Collected on sandy prairie.

Ludwigia alternifolia L. Seedbox. Infrequent. Moist ditch near Homestead. Ludwigia polycarpa Short & Peter. Specimen in S.U.I. herbarium. Collected by B. Shimek in a bog near Homestead.

Oenothera biennis L. Common Evening Primrose. Common. Roadsides, fields, waste places.

Oenothera rhombipetala Nutt. Frequent. Sandy places, prairie.

Oenothera serrulata Nutt. Rare. Sandy soil west of Homestead.

FAMILY 128. ARALIACEAE

Aralia nudicaulis L. Wild Sarsaparilla. Common. Upland woods.

Aralia racemosa L. American Spikenard. Rare. Rich woods south of Amana.

Panax quinquefolia L. Ginseng. Rare. Rich woods south of Amana.

Family 129. Umbelliferae

Chaerophyllum procumbens (L.) Crantz. Chervil. Common. Bottomland south of Amana.

Cicuta maculata L. Spotted cowbane. Reported by Shimek, (1948).

Cryptotaenia canadensis (L.)DC. Honewort. Common. Alluvial woods. Daucus carota L. Carrot. Infrequent. Along railroads, waste places. Introduced.

Eryngium yuccifolium Michx. Rattlesnake Master. Rare. Prairie west of Homestead.

Osmorhiza claytoni (Michx.) Clarke. Sweet Cicely. Common. Rich woods. Pastinaca sativa L. Parsnip. Common. Roadsides, waste places. Introduced. Perideridia americana (Nutt.) Reichenb. Reported from B. Shimek's field notes.

Sanicula gregaria Bickn. Black Snakeroot. Common. Rich woods.

Sanicula canadensis L. Reported from B. Shimek's field notes.

Sium suave Walt. Water Parsnip. Infrequent. Moist ditches and ravines. Thaspium trifoliatum (L.) Britt. Meadow Parsnip. Infrequent. Moist places along roads and railroads.

Zizia aurea (L.) Koch. Golden Alexanders. Frequent. Border of woods.

Family 130. Cornaceae

Cornus alternifolia L. f. Pagoda Dogwood. Common. Rich woods. Cornus drummondi Meyer. Rough-leaved Dogwood. Frequent. Damp woods and bottomlands.

Cornus obliqua Raf. Silky Dogwood. Rare. Bottomland south of Amana. Cornus racemosa Lam. Gray Dogwood. Common. Woods and woodland borders.

Cornus stolonifera Michx. Red-osier Dogwood. Rare. Collected once along woodland road south of Amana.

FAMILY 132. PYROLACEAE

Pyrola elliptica Nutt. Shinleaf. Rare. Upland woods north of Middle Amana.

FAMILY 135. PRIMULACEAE

Androsace occidentalis Pursh. Reported from B. Shimek's field notes. Dodecatheon meadia L. Shooting Star. Reported by Shimek, (1911). Lysimachia ciliata L. Fringed Loosestrife. Common. Ditches along roads, prairie, pastures.

FAMILY 141. OLEACEAE

Fraxinus americana L. White Ash. Common. Upland woods.
Fraxinus nigra L. Black Ash. Infrequent. Upland woods.
Fraxinus pensylvanica Marsh. Green Ash. Infrequent. Bottomland along Iowa River.

FAMILY 143. GENTIANACEAE

Gentiana andrewsii Griseb. Closed Gentian. Rare. Moist ditch north of Homestead, damp places.

Gentiana crinita Froel. Fringed Gentian. Reported from B. Shimek's field notes.

Gentiana flavida Gray. Yellowish Gentian. Rare. Along woodland road south of Amana.

Gentiana puberula Michx. Downy Gentian. Rare. Prairie one mile west of Homestead.

Gentiana saponaria L. Soapwort Gentian. Reported from B. Shimek's field notes.

FAMILY 144. APOCYNACEAE

Apocynum androsaemifolium L. Spreading Dogbane. Rare. Along Route 149 north of Homestead.

Apocynum cannabinum L. Indian Hemp. Infrequent. Along roads and railroads.

Family 145. Asclepiadaceae

Asclepias amplexicaulis Sm. Rare. Prairie one mile west of Homestead. Asclepias incarnata L. Swamp Milkweed. Infrequent. Moist places around ponds, bottomlands.

Asclepias ovalifolia Done. Reported by Shimek, (1911).
Asclepias purpurascens L. Purple Milkweed. Infrequent. Roadsides and fields.

Asclepias syriaca L. Common Milkweed. Common. Roadsides, fields. Asclepias tuberosa L. Butterfly Weed. Frequent. Along roads and railroads. Asclepias verticillata L. Horsetail Milkweed. Common. Along railroads, prairie.

FAMILY 146. CONVOLVULACEAE

Convolvulus sepium L. Hedge Bindweed. Common. Roadsides and ditches. Convolvulus spithamaeus L. Low Bindweed. Reported from B. Shimek's field notes.

Cuscuta glomerata Choisy. Dodder. Reported from B. Shimek's field notes. Cuscuta gronovii Willd. Dodder. Rare. One large patch along railroad east of Homestead.

Ipomoea purpurea (L)Roth. Common Morning Glory. Reported from B. Shimek's field notes. Introduced.

Family 147. Polemoniaceae

Phlox divaricata L. Blue Phlox. Common. Open woods.

Phlox pilosa L. Downy Phlox. Common. Sandy areas, prairie.

Polemonium reptans L. Creeping Polemonium. Common. Upland woods.

FAMILY 148. HYDROPHYLLACEAE

Ellisia nyctelea L. Ellisia. Common. Roadsides, waste places. Hydrophyllum virginianum L. Virginia Waterleaf. Common. Moist woods.

FAMILY 149. BORAGINACEAE

Cynoglossum officinalis L. Common Hound's Tongue. Rare. Found in field in southern part of county.

Hackelia virginiana (L.) Johnst. Beggar's Lice. Common. Moist woods, fields.

Lappula echinata Gilib. Sticktight. Reported from B. Shimek's field notes. Lithospermum canescens (Michx.) Lehm. Puccoon. Frequent. Prairie, sandy

Lithospermum croceum Fern. Frequent. Prairie west of Homestead.

Lithospermum incisum Lehm. Reported by Shimek, (1911).

Mertensia virginica (L.)Link. Virginia Bluebells. Infrequent. Wooded slope in Amana Woods.

Onosmodium occidentale Mackenz. False Gromwell. Rare. Amana woods south of Amana.

Family 150. Verbenaceae

Lippia lanceolata Michx. Fogfruit. Common. Bottomland along Iowa River. Verbena bracteata Lag. & Rodr. Common. Roadsides, fields, waste places. Verbena hastata L. Blue Vervain. Infrequent. Opening above Dutch Lake. Verbena stricta Vent. Hoary Vervain, Common. Roadsides, along railroads, fields.

Verbena urticifolia L. White Vervain. Common. Fields and waste places.

FAMILY 151. LABIATAE

Agastache nepetoides (L.) Ktze. Yellow Giant Hyssop. Rare. Moist ravine in Amana Woods.

Blephilia hirsuta (Pursh.) Benth. Wood Mint. Frequent. Along railroads, fields.

Glecoma hederacea L. Ground Ivy. Infrequent. Moist shady places in fields. Introduced.

Medeoma hispida Pursh. Mock Pennyroyal. Rare. Along railroad at Homestead.

Lamium amplexicaule L. Henbit. Reported from B. Shimek's field notes.

Introduced.

Leonurus cardiaca L. Common Motherwort. Infrequent. Moist ravine in Amana woods. Introduced.

Lycopus americanus Muhl. Water Horehound. Rare. Moist ravine north of Williamsburg.

Lycopus virginicus L. Horehound. Infrequent. Moist ditch along Route 6 near Homestead.

Mentha arvensis L. var. villosa (Benth.) Stewart. Infrequent. Moist ground near Homestead.

Mentha piperita L. Peppermint. Reported from B. Shimek's field notes. Introduced.

Mentha spicata L. Spearmint. Reported from B. Shimek's field notes. Intro-

Monarda fistulosa L. Wild Bergamot. Common. Along railroads, in fields.

Nepeta cataria L. Catnip. Reported by Pammel and King, (1926). Introduced.

Physostegia virginiana (L.) Benth. var. speciosa (Sw.) Gray. False Dragonhead. Rare. Moist ravine near Homestead.

Prunella vulgaris L. Heal-all. Common. Roadsides, fields, waste places. Introduced.

Pycnanthemum tenuifolium Schrad. Mountain Mint. Common. Along roads, ditches.

Pycnanthemum pilosum Nutt. Infrequent. Open woods, sandy places.

Scutellaria lateriflora L. Mad-dog Skullcap. Rare. Bog on slope above Dutch

Scutellaria ovata Hill. var. versicolor (Nutt.) Fern. Reported from B. Shimek's field notes.

Stachys palustris L. Woundwort. Infrequent. Along roads, in fields.

Stachys tenuifolia Willd. Hedge Nettle. Common. Moist ravines, bottomlands.

Teuchrium canadense L. Wood Sage. Common. Rich woods, bottomlands.

FAMILY 152. SOLANACEAE

Datura stramonium L. Jimsonweed. Reported from B. Shimek's field notes. Introduced.

Physalis heterophylla Nees. Ground Cherry. Infrequent. Along railroads, in fields.

Physalis pruinosa L. Rare. Prairie west of Homestead. Physalis pubescens L. Reported by Shimek, (1911).

Physalis subglabrata Mackenz. & Bush. Rare. Along railroad west of Home-

Physalis virginiana Mill. Reported by Pammel and King, (1926). Solanum carolinense L. Horse Nettle. Common. Sandy openings, fields, waste places.

Solanum nigrum L. Black Nightshade. Frequent. Woods, fields, grasslands. Introduced.

Solanum rostratum Dunal. Buffalo Bur. Reported by Pammel and King, (1926).

Family 153. Scrophulariaceae

Castilleja coccinea (L.) Spreng. Scarlet Painted Cup. Reported from B. Shimek's field notes.

Chelone glabra L. Turtlehead. Rare. Moist ravine in Amana Woods.

Gerardia tenuifolia Vahl. Rare. Woodland road in Amana Woods.

Linaria vulgaris Hill. Butter-and-eggs. Reported by Pammel and King, (1926). Lindernia dubia (L.) Pennell. False Pimpernel. Rare. Moist sandy bank along Iowa River.

Mimulus ringens L. Monkey Flower. Common. Alluvial ground.

Pedicularis lanceolata Michx. Lousewort. Specimen in S.U.I. herbarium. Collected in low boggy places.

Pedicularis canadensis L. Early Woodbetony. Frequent. Moist wooded slopes south of Amana.

Penstemon digitalis Nutt. Beard Tongue. Rare. Along Route 6 at Homestead. Scrophularia lanceolata Pursh. Figwort. Infrequent. Prairie strip west of Marengo.

Scrophularia marilandica L. Carpenter's Square. Frequent. Moist ravines, bottomlands.

Verbascum blattaria L. Moth Mullein. Reported by Pammel and King, (1926). Introduced.

Verbascum thapsus L. Common Mullein. Common. Roadsides, waste places. Introduced.

Veronica peregrina L. Purslane Speedwell. Common. Roadsides and waste places.

Veronicastrum virginicum (L.) Farw. Culver's Root. Infrequent. Along railroads in weedy places.

FAMILY 158. ACANTHACEAE

Ruellia humilis Nutt. Ruellia. Infrequent. Roadsides and fields.

FAMILY 159. PHRYMACEAE

Phryma leptostachya L. Lopseed. Common. Rich woods and thickets.

FAMILY 160. PLANTAGINACEAE

Plantago aristata Michx. Bracted Plaintain. Frequent. Sandy places, prairie. Plantago purshii R. & S. Rare. Prairie west of Homestead. Plantago rugellii Dene. Common. Roadsides and waste places.

FAMILY 161. RUBIACEAE

Cephalanthus occidentalis L. Buttonbush. Common. Alluvial ground.
Galium aparine L. Cleavers. Common. Moist woods, alluvial soil.
Galium circaezans Michx. Wild Licorice. Common. Woodlands.
Galium concinnum T. & G. Common. Woodlands.
Galium obtusum Bigel. Rare. Moist ravine east of Homestead.
Galium triflorum Michx. Sweet-scented Bedstraw. Rare. Amana Woods.

FAMILY 162. CAPRIFOLIACEAE

Lonicera dioica L. Honeysuckle, Rare. Alluvial woodland in southern part of county.

Lonicera sempervirens L. Coral Honeysuckle. Reported from B. Shimek's field notes. Introduced.

Sambucus canadensis L. Common Elder. Infrequent. Along North English River.

Triosteum perfoliatum L. Horse Gentian. Frequent. Fields and pastures.

Viburnum lentago L. Nannyberry. Rare. Woodland road south of Amana.

Viburnum opulus L. Geulder-Rose. Reported from B. Shimek's field notes. Introduced.

Viburnum prunifolium L. Black Haw. Reported from B. Shimek's field notes.

FAMILY 166. CHCHRBITACEAE

Echinocystis lobata (Michx.) T. & G. Reported from B. Shimek's field notes.

Family 167. Campanulaceae

Campanula mericana L. Bellflower. Common. Alluvial ground, railway embankments.

Campanula rotundifolia L. Harebell. Reported from B. Shimek's field notes. Lobelia cardinalis L. Cardinal Flower. Reported by Shimek, (1948).

Lobelia siphilitica L. Great Lobelia. Frequent. Moist ditches.

Lobelia spicata Lam. Spike Lobelia. Common. Rich meadows and fields.

Specularia perfoliata (L.) A. DC. Venus's Looking Glass. Infrequent. Along railroad west of Marengo.

FAMILY 168. COMPOSITAE

Achillea millefolium L. Common Yarrow. Common. Roadsides and fields. Ambrosia artemisifolia L. Common Ragweed. Common. Roadsides, waste places.

Ambrosia trifida L. Giant Ragweed. Common. Alluvial soil, waste places. Anaphalis margaritacea (L.) Clarke. Pearly Everlasting. Common. Sandy places, pastures.

Antennaria neglecta Greene. Pussytoes. Rare. Prairie west of Homestead. Antennaria plantaginifolia (L.) Richards. Common. Sandy roadsides, woods,

Anthemis cotula L. Dog-fennel. Common. Roadsides and waste places. Introduced.

Artemisia ludoviciana Nutt. White Sage. Rare. Along railroad west of Home-

Aster azureus Lindl. Rare. Prairie west of Homestead.

Aster cordifolius L. Rare. Border of Amana Woods.

Aster ericoides L. Frequent. Open woods, prairie.

Aster laevis L. Frequent. Open woods, along roads.

Aster lateriflorus (L.) Britt. Frequent. Open woods, fields.

Aster novae-angliae L. New England Aster. Infrequent. Moist ditches along road north of Homestead.

Aster ontarionis Wieg. Infrequent. Along Iowa River north of South Amana. Aster pilosus Willd. Rare. Sandy soil west of Homestead.
Aster praealtus Poir. Infrequent. Along roads and railroads.

Aster puniceus L. var. firmus (Nees) T. & G. Rare. Moist ground along road north of Williamsburg.

Aster sagittifolius Wedemeyer. Common. Dry open woods, fields.

Aster sagittifolius Wedem. var. drummondii (Lindl.) Shinners. Infrequent. Border of Amana Woods.

Aster sericeus Vent. Rare. Prairie west of Homestead. Aster simplex Willd. Frequent. Sandy places, roadsides.

Aster tradescanti L. Rare. Border of Amana Woods.

Bidens cernua L. Stick Tight. Common. Bottomlands and moist places.

Bidens comosa (Grav) Wieg. Beggar Ticks. Rare. Along Iowa River north of Homestead.

Tickseed-Sunflower. Rare. Along Iowa River Bidens coronata (L.) Britt. north of South Amana.

Bidens frondosa L. Common. Alluvial soil.

Bidens vulgata Greene. Rare. Sandy shore of Iowa River north of South

Boltonia latisquama Gray. Rare. Along Iowa River north of South Amana. Cichorium intybus L. Chicory, Blue Sailors. Reported from B. Shimek's field notes. Introduced.

Cirsium altissimum (L.) Spreng. Tall Thistle. Rare. Along Route 149 north of Homestead.

Cirsium discolor (Muhl.) Spreng. Infrequent. Along railroads, in fields. Cirsium hillii (Canby) Fern. Reported from B. Shimek's field notes.

Cirsium iowense (Pammel) Fern. Reported by Shimek, (1911).
Cirsium vulgare (Savi.) Tenore. Bull Thistle. Common. Clearings and pastures. Introduced.

Coreopsis palmata Nutt. Tickseed. Infrequent. Prairie west of Homestead. Dyssodia papposa (Vent.) Hitchc. Fetid Marigold. Reported from B. Shimek's field notes.

Eclipta alba (L.) Hassk. Yerba-de-Tago. Rare. Near lotus pond west of

Echinacea pallida Nutt. Frequent. Prairie west of Homestead.

Echinacea purpurea (L.) Moench. Purple Cone Flower. Reported from B. Shimek's field notes.

Erechtites hieracifolia (L.) Raf. Fireweed. Rare. Roadside north of Williamsburg.

Erigeron annuus (L.) Pers. White Top. Infrequent. Open woods, roadsides.

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Erigeron canadensis L. Horseweed. Common. Fields and waste places. Erigeron philadelphicus L. Philadelphia Fleabane. Common. Moist places. bottomlands.

Erigeron strigosus Muhl. Common. Along railroads, roads, fields.

Eupatorium altissimum L. Tall Thoroughwort. Rare. Along railroad at Homestead.

Eupatorium maculatum L. Joe-Pye-Weed. Rare. Bog on slope above Dutch

Eupatorium perfoliatum L. Boneset. Common. Fields, moist ground.

Eupatorium rugosum Houtt. White Snakeroot. Frequent. Rich woods.

Helenium autumnale L. Sneezeweed. Rare. Moist ravine north of Williams-

Helianthus annuus L. Common Sunflower. Frequent. Along roads and rail-

Helianthus decapetalus L. Sunflower. Rare. Woods north of Middle Amana. Helianthus grosseserratus Martens. Common. Roadsides and prairie. Helianthus laetiflorus Pers. Prairie Sunflower. Rare. Prairie west of Home-

Helianthus strumosus L. Infrequent. Along roads and railroads. Helianthus tuberosus L. Jerusalem Artichoke. Rare. Along railroad west of Homestead.

Heliopsis helianthoides (L.) Sweet var. scabra (Dunal) Fern. Ox Eye. Frequent. Along railroads, woods.

Hieracium canadense Michx. Hawkweed. Rare. Wooded slope above Dutch Lake.

Iva xanthifolia Nutt. Reported by Shimek, (1911).

Krigia biflora (Walt.) Blake. Dwarf Dandelion. Rare. Dry bank above Dutch Lake.

Kuhnia eupatorioides L. False Boneset. Common. Along roads, railroads, waste places.

Lactuca canadensis L. Wild Lettuce. Common. Borders of woods, fields. Lactuca floridana (L.) Guertn. Rare. Along Route 149 north of Homestead. Lactuca pulchella (Pursh) DC. Blue Lettuce. Reported by Pammel and King, **(1926)**.

Lactuca scariola L. Prickly Lettuce. Rare. Along Route 149 north of Homestead. Introduced.

Liatris aspera Michx. Blazing Star. Frequent. Sandy soil, prairie. Liatris pycnostachya Michx. Reported from B. Shimek's field notes.

Matricaria matricarioides (Less.) Porter. Pineapple Weed. Rare. Along road

north of Homestead. Introduced. Prenanthes alba L. Rattlesnake Root. Infrequent. Border of Amana Woods.

Ratbida pinnata (Vent.) Barnh. Prairie Coneflower. Common. Prairies and fields.

Rudbeckia hirta L. Brown-eyed Susan. Common. Fields and open woods. Rudbeckia laciniata L. Rare. Along railroad near Homestead.

Rudbeckia triloba L. Coneflower. Rare. Moist ravine north of Williamsburg.

Senecio plattensis Nutt. Frequent. Roadsides, dry places. Silphium integrifolium Michx. Rosinweed. Common. Roadsides, fields,

Silphium laciniatum L. Compass Plant. Frequent. Roadsides, fields. Solidago altissima L. Tall Goldenrod. Frequent. Roadsides, sandy places,

prairie.

Solidago flexicaulis L. Broad-leaved Goldenrod. Rare. Woods south of Amana.

Solidago gigantea Ait. Late Goldenrod. Frequent. Roadsides, prairie.

Solidago graminifolia (L.) Salisb. Rare. Along railroad at Homestead. Solidago missouriensis Nutt. Frequent. Along railroads, prairie.

Solidago nemoralis Ait. Field Goldenrod. Infrequent. Sandy area above Dutch Lake.

Solidago rigida L. Rare. Woodland road south of Amana, prairie. Solidago speciosa Nutt. Showy Goldenrod. Rare. Prairie west of Homestead.

Solidago ulmifolia Muhl. Common. Rich woods.

Sonchus asper (L.) Hill. Sow Thistle. Reported by Pammel and King, (1926). Introduced.

Sonchus oleraceus L. Reported by Pammel and King, (1926).

Tanacetum vulgare L. Common Tansy. Reported from B. Shimek's field notes.

Tanaxacum erythrospermum Andrs. Red-seeded Dandelion. Frequent. Road sides. Introduced.

Taraxacum officinale Weber. Common Dandelion. Common. Roadsides, fields. Introduced.

Tragopogon major Jacq. Goat's Beard. Frequent. Roadsides. Introduced.

Vernonia fasciculata Michx. Ironweed. Frequent. Roadsides, fields, sandy places.

Xanthium italicum Moretti. Cocklebur. Common. Along railroads, sandy places.

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