

1953

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Recommended Citation

Grant, Martin L. (1953) "Notes on Iowa Vascular Plants," *Proceedings of the Iowa Academy of Science*, 60(1), 141-149.

Available at: <https://scholarworks.uni.edu/pias/vol60/iss1/19>

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Notes on Iowa Vascular Plants

By MARTIN L. GRANT

Recent collecting and studying in herbaria have called forth the following notes on some of the rarer plants of Iowa. The writer's collections have been, or will be, deposited in the herbaria of Iowa State Teachers College (ISTC), Iowa State College (ISC), the State University of Iowa (SUI), and, for Dickinson County plants, the Iowa Lakeside Laboratory at Lake Okoboji (ILL). Accordingly, herbarium citations are not given for the writer's collections.

This article contains notes on 16 species of monocots and 26 of dicots, with one conifer, a total of 43 species, representing 17 families, principally Lemnaceae (5), Orchidaceae (10), Rosaceae (4), Leguminosae (7), and Campanulaceae (3). There are treated two new albino color forms (*Linum sulcatum* and *Campanula americana*), notes on three other color forms, one new state record (*Petalostemon villosus*), 16 range extensions with summaries of distribution, 11 descriptions of recent collections of rare plants with summaries of distribution, and 9 other distributional items.

Within families, the genera and species are listed alphabetically, the families being arranged according to the Engler-Prantl system, with the Torre and Harms numbers for the families preceding each species citation. Nomenclature is according to Gray's Manual (Fernald, 1950). A bibliography is appended.

I wish to thank Dr. Duane Isley and Dr. Robert Thorne for their assistance in helping with the facilities of the ISC and SUI herbaria, respectively.

6. *Abies balsamea* (L.) Mill. Balsam fir.

Two collections from Winneshiek Co., in forests on the bluffs on the s. side of the Upper Iowa River were made recently: Grant 11719, Aug. 22, 1952, Kendallville (NW 33, 100-10), hardwood forest, tree 0.5 m. tall; Grant 11743, ½ m. e. of Bluffton, tree 10 m. high, with ripe cones. These localities are Stations 4 and 1, respectively, of the six known localities where fir grows in this county (Conard, 1939). At Station 4, this small tree was all that was located of the half-dozen larger ones remaining in 1937. Our search, however, was not exhaustive. At Station 1, the forest is in excellent condition, and reproduction is impressive.

14. *Triglochin maritima* L. Arrow-grass.

This species is well-known from the four Lake Counties (Dickinson, Emmet, Clay and Palo Alto), but a considerable range extension within the state is represented by the following collection from Winnebago Co: R. F. Thorne, Aug. 21, 1952, 1.5 m. s. of Lake Mills, peat bog (SUI).

The other species known from Iowa, *T. palustris* L., has not yet been found outside the four Lake Counties, and the third species in the family, *Scheuchzeria palustris* L. var. *americana* Fern., is known in Iowa only from Emmet Co.

24. *Lemnaceae*. Duckweeds.

A superficial examination of all the Lemnaceae in the herbaria at ISC, SUI, ISTC, and ILL did not disclose any of them as being in either flowering or fruiting condition, though I am sure a more careful examination would turn up something. Accordingly, it is noteworthy to record flowering specimens of all five of the species in 1952 summer collections. The county distributions given below are based entirely on these four herbarium collections. In addition, Gilly and McDonald report *Lemna perpusilla* Torr. (1938) and *Lemna minima* Phillipi (1949) from Jefferson Co.

24. *Lemna minor*. Small duckweed.

Grant 11525, June 27, 1952, Dickinson Co., S. Green Slough (35, 99-37), in flower and fruit. Found in fifteen counties; northeast of a line from Lyon, Clay, Black Hawk, Johnson, and Lee; and also Taylor. Also reported from Emmet, Iowa, and Cedar Cos. In Muscatine Co. it was "Found in bloom along the Cedar River near the BCRN rr. bridge, Sept. 4, 1894" (Barnes, 1900).

24. *Lemna trisulca* L. Star duckweed.

Grant 11526, June 27, 1952, Dickinson Co., S. Green Slough (35, 99-37), in flower and fruit. Found in fourteen counties; northeast of a line from Clay, Wright, Black Hawk, Linn, and Louisa; also Fremont. Also reported from Winneshiek Co. (Shimek, 1906).

24. *Spirodela polyrhiza* (L.) Schleid. Water flaxseed.

Grant 11527, June 27, 1952, Dickinson Co., S. Green Slough (35, 99-37), one single plant in flower; Aug. 11, 1952, Dickinson Pond (NENW 25, 99-37), one more in flower. Found in nineteen counties; northeast of a line from Lyon, Clay, Webster, Story, and Lee; also Decatur. Reported from Winneshiek Co. (Shimek, 1906).

24. *Wolffia columbiana* Karst. Water-meal.

Grant 11658, Aug. 11, 1952, Dickinson Co., Dickinson Pond, NENW 25, 99-37, in flower; Grant and Thorne 11649, Aug. 18, 1952, Dickinson Co., Beck Canal, SESE 23, 99-37, floating as a solid, almost pure, mass-culture, including *W. punctata*, 1.5 cm. thick, covering about 250 square feet of water, occasional individuals with flowers. R. D. Radcliff described a similar concentration of *W. papulifera* in Kerr Co., Texas, in masses "to the depth of several inches", but presumably without flowers (Blake, 1952). Shimek (1917) stated it was very abundant in Dickinson Co., and "numerous flowering specimens were collected in August." Iowa collections have been seen from Dickinson, Black Hawk, Linn, Johnson, and Muscatine Cos.

24. *Wolffia punctata* Griseb. Water-meal.

R. F. Thorne, Aug. 18, 1952, Beck Canal SESE 23, 99-37, Dickinson Co., with the preceding species, but flowers much less common. There are specimens labelled *W. punctata* from Dickinson, Linn, Johnson, Muscatine, Louisa, and Lee Cos., but in the dried condition identification is not necessarily certain. Gilly and McDonald (1949) report it from Jefferson Co., and Shimek listed it from Iowa Co. (Easterly, 1952).

The history of the reporting of these two species from the state is a bit confusing. Shimek (1915) reported *W. punctata* only, from Dickinson Co., and

that as "very rare". Later (1917) he reported *W. columbiana* as very abundant, without mentioning *W. punctata*. Two of his collections from this county have been found. One, Aug. 7, 1916, Green Slough, is apparently *W. columbiana*, though the name on the label, added sometime later, is *W. punctata* (SUI); the other, Aug. 26, 1918, same locality, is a part of a collection of *Lemna minor*, and does not seem determinable (SUI).

My own field experience with *Wolffia* in Dickinson and Black Hawk Cos. suggests that *W. columbiana* there is a hundred times as prevalent as *W. punctata*, but the larger number of herbarium specimens labelled as the latter seems to belie a similar condition elsewhere in the state. Cratty (1933), Hayden (1943), Gilly and McDonald (1949), and Conard (1951 and earlier editions) report *W. punctata* only. Much more field work is necessary to check the actual distribution of the two species.

50. *Corallorhiza maculata* Raf. Spotted coral-root.

—Shimek, July 18 and Aug. 17-19, 1903, Winneshiek Co., Hesper, upland woods (ISC, SUI); Shimek, Aug. 7 and 11, 1924, Clayton Co., McGregor Heights (ISC, SUI); Grant 11716, Aug. 22, 1952, Winneshiek Co., Kendallville, oak woods, top of Iowa River bluff. These three seem to be the only Iowa collections. It was reported by Shimek (1906) as *C. multiflora*, but was omitted from the lists of Cratty (1933) and Conard (1951 and earlier eds). The specimens of the last collection are forma *punicea* (Bart.) Weatherby and Adams, but the color forms of the older Shimek specimens, collected 50 and 29 years ago, are apparently indeterminate.

50. *Corallorhiza odonatorhiza* (Willd.) Nutt. Late coral-root.

This, the only other species of the genus in Iowa, is known (ISC, SUI) from Clayton (Shimek, Aug. 21, 1920), Linn (R. W. Pohl, Aug. 22, 1948), and Johnson (six collections) Cos., though some of them have been determined as *C. maculata* and as *C. trifida*. All appear to be the typical form. It has been reported from Scott Co. (Barnes, 1900).

50. *Habenaria viridis* (L.) R.Br. Bracted orchid.

Found in the ne. two-fifths of the state. There are specimens (ISC, SUI) northeast of a line through Dickinson, Emmet, Webster, Boone, Story, Johnson, and Muscatine Cos., including in addition Cerro Gordo, Fayette, Winneshiek, Allamakee, Clayton, Dubuque, Linn, and Clinton. The plants are intermediate between var. *interjecta* Fern. and var. *bracteata* (Muhl.) Gray, with the lower bracts lanceolate to linear-lanceolate, averaging twice (1.8-2.5) the length of the flowers, and becoming divergent. The upper bracts usually just equal the flowers. Fernald (1950) says that var. *interjecta* is "exactly intermediate between the typical Eurasian *H. viridis* and . . . var. *bracteata*." Apparently it is a continuous series. The species has also been reported from Decatur, Jasper, Poweshiek, and Delaware Cos. (Fitzpatrick, 1900).

50. *Habenaria hyperborea* (L.) R.Br. var. *huronensis* (Nutt.) Farwell. Northern green orchis.

Known only from the following counties: Dickinson (1918), Emmet (1925), Story (1890), and Winneshiek (Mrs. M. C. Carter, Hesper, n.d.). As these data show, the plant apparently has not been collected for 28 years.

50. *Liparis liliifolia* (L.) Richard. Common twayblade.

Found (ISC, SUI) roughly in the se. half of the state, e. and se. of Winneshiek, Story, Dallas, and Decatur Cos., including also Clayton, Jasper, Iowa, Johnson, Muscatine, Wapello, Davis, and Van Buren. It has been re-

50. *Liparis loeselii* Richard. Bog twayblade.

Has been found (ISC, SUI) only in a few, mostly northern, counties: Dickinson, Emmet, Palo Alto, Cerro Gordo, Black Hawk, and Muscatine.

50. *Spiranthes cernua* (L.) Richard. Common ladies'-tresses.

There are specimens (SUI, ISC, ISTC) from twenty-two counties, extending northwest to Emmet, Palo Alto and Harrison. An unpublished county record is Black Hawk, Grant 11774, Sept. 14, 1952, Golinvaux Slough (9, 89-13). Anderson (1943) reported it from Dickinson Co., but apparently left no specimens. The plants I have seen at his reported locality, Silver Lake fen, are *S. romanzoffiana*. Other records in the literature are Woodbury (Pammel, fide Fitzpatrick, 1900); and Worth, Winnebago, Wright, and Hamilton, (Pammel, 1909).

Two Cerro Gordo Co. specimens: Shimek, Sept. 14, 1920 and Sept. 11, 1921, Buffalo Slough, Mason City (ISC and SUI, resp.) are the long-bracted var. *ochroleuca* (Rydb.) Ames.

50. *Spiranthes gracilis* (Bigel.) Beck. Slender ladies'-tresses.

Rarer than the preceding, with specimens (ISC, SUI) from five counties: Winneshiek, Johnson, Muscatine, Jefferson, and Decatur. Also reported from Cedar Co. (Fay, 1952).

50. *Spiranthes romanzoffiana* Cham. Hooded ladies'-tresses.

Of this, the rarest of the three Iowa species, there are three collections from Emmet Co.: Cratty, 1890, Armstrong (ISC); Cratty n.d. n.loc. (SUI); Wolden, June, 1925, bog near Estherville (ISC); one from Worth Co.: Pammel, Sept., 1908, Fertile (ISC); and two from the Silver Lake fen in Dickinson Co.: Grant 11180 and 11558, July 6, 1949, and July 12, 1952.

50. *Triphora trianthophora* (Sw.) Rydb. Nodding Pogonia.

Bremer Co. may be added to the distributional record of this very sporadically-occurring orchid on the basis of the following record: C. W. Lantz, Sept. 7, 1927, Denver, Bremer Co., Big Woods, abundant (ISTC). This makes six eastern counties in which it occurs (Allamakee, Clayton, Fayette, Bremer, Linn, and Johnson), but there is only one other collection made within the last thirty years. The plant seems to remain dormant in forest humus for long periods, and, since the factors governing the times of its appearance are not known, the full data for each of the other collections are here given also. All eight are in flowering condition.

Allamakee: E. Orr, Aug. 24, 1902, 3.m. e. of Waukon, rich woods (ISC).

Clayton: Shimek, Aug. 19, 1921, Pike's Peak, Pictured Rocks, wooded canon (SUI).

Mary Musgrove, Aug. 14, 1940, Pike's Peak (ISC).

Fayette: B. Fink, Sept., 1893, Robinson's Woods (ISC).

Shimek, Aug. 15, 1895, damp woods (ISC).

Linn. Berry, Aug. 2, 1909 (SUI).

Johnson: Mary Linder, spring, 1889 (SUI).

56. *Salix bebbiana* Sarg. Beaked willow.

—Grant 11697, Winnebago Co., Aug. 21, 1952, 1.5 m. s. of Lake Mills, peat bog. The species is also known (SUI, as *S. rostrata*) from: Cerro Gordo, Allamakee, Delaware; and Palo Alto (ISC) Counties. It has also been reported from: Hardin, Marshall, Floyd, and Fayette (Ball, 1900); Emmet, Worth, Wright, Hamilton, Winneshiek, and Clayton (Pammel, 1909); and Dubuque (Pammel, 1924) Cos.

56. *Salix pedicellaris* Pursh var. *hypoglauca* Fern. Smooth bog willow.

Being known from only three localities in Iowa, a recent collection might be of interest: Grant 11698, Winnebago Co., Aug. 21, 1952, 1.5 m. s. of Lake Mills, peat bog. It was previously collected here by Pammel in 1908 and 1918 (ISC); and is also known from Cerro Gordo Co., Buffalo Slough, Shimek, July 29, 1922 (ISC, SUI); and from Emmet Co., Armstrong, Cratty, 1883 and 1884 (ISC, SUI). Pammel reported it from Worth Co. (1909).

61. *Corylus cornuta* Marsh. Beaked hazel.

An additional record for this shrub: Grant 11738, Winneshiek Co., Aug. 22, 1952, Bluffton, oak-fir forest. It is known (ISC, SUI) only from a block of four contiguous extreme-northeastern counties: Winneshiek, Allamakee, Clayton, and Dubuque.

88. *Nelumbo lutea* (Willd.) Pers. Yellow lotus.

Harrison Co., Grant 11620, Aug. 5, 1952, in lake 2 m. n. of Mondamin (SW 13, 80-45). This adds another county to the herbarium (ISC, SUI) representation of this easily-travelling (with human assistance) plant. It is now known from 18 counties: five along the western border: Woodbury (P. Monson: "Introduced from Guard Lake, Monona Co."), Monona, Harrison, Pottawattamie, and Fremont; two northeastern ones: Allamakee and Clayton; seven southeastern counties: Muscatine, Louisa, Henry (cultivated?), Des Moines, Lee, Van Buren, and Davis; and four in the interior: Clay, Madison, Taylor, and Iowa. Pammel (Taylor, 1928) reported it from Appanoose Co. also.

126. *Potentilla fruticosa* L. Shrubby cinquefoil.

—Grant 11750, Aug. 22, 1952, Winneshiek Co., ¼ m. s. of Bluffton, top of limestone bluff, Upper Iowa River. The only other Iowa herbarium record of this (ISC, SUI) is Fitzpatrick, June 25 and 27, 1895, Allamakee Co. (SUI).

126. *Potentilla palustris* (L.) Scop. Marsh five-finger.

A recent collection of this northern bog plant is: Grant 11690, Aug. 21, 1952, Winnebago Co., 1.5 m. s. of Lake Mills (N15.99-23), in peat bog. It is forma *subsericea* (Becker) Wolf. The plant is known (ISC, SUI) from eight counties in northern Iowa, here listed with the dates of the collections: Clay (1935), Emmet (1878-1884), Winnebago (1908, 1921), Worth (1908), Hancock (1895), Cerro Gordo (1896-1926), Webster (1905), and Linn (1912).

126. *Potentilla tridentata* Ait. Three-toothed cinquefoil.

The species is known in Iowa only from a St. Peter sandstone outcrop two miles ne. of Hesper, NENE 12,100-8) in Winneshiek Co. Four collections have been seen: A. S. Hitchcock, 1880's (ISC); Shimek Aug. 19, 1903 (ISC) and July 19, 1927 (SUI); and Grant 11754, Aug. 22, 1952.

126. *Pyrus (Aronia) melanocarpa* (Michx.) Willd. Black chokeberry.

Like *Potentilla tridentata*, this species is known in Iowa only from a Winneshiek Co. sandstone outcrop near Hesper, but in a different locality, this one being only one-half mile ne. of Hesper (SWNE 11, 100-8). We have three collections: Shimek, Aug. 22, 1903, and July 19, 1927 (SUI); and Grant 11761, Aug. 22, 1952, edge of bur oak forest.

128. *Amorpha nana* Nutt. Fragrant false-indigo.

This low shrub is represented (SUI, ISC) by specimens from eight western Iowa counties: the four Lake Counties (Dickinson, Emmet, Clay, Palo

Alto), and Cerro Gordo, Cherokee, Guthrie, and Decatur. A presumed Delaware Co. record, J. E. Cameron, Oct. 4, 1897, as "*A. microphylla*" (SUI), is actually a plant of *A. canescens* Pursh forma *glabrata* (Gray) Fassett, which, in younger stages, I have myself confused with *A. nana*.

128. *Astragalus distortus* T. & G. Twisted milk-vetch.

An interesting example of migration routes is shown by this plant of sandy shores. It occurs (ISC, SUI, ISTC) in nine southern-border and southeastern counties (Page, Decatur, Appanoose, Wapello, Davis, Jefferson, Lee, Louisa, and Muscatine), and has migrated up the Cedar River, with one Linn Co. collection (Berry, July 16, 1913, Cedar Rapids; SUI), and eight from Black Hawk Co. The species is confined to the central and lower Mississippi Valley, with an outlying patch in the central Appalachians.

128. *Astragalus goniatius* Nutt. Angled milk-vetch.

There are many species of northern plants which just get into Iowa in the four Lake Counties. Most of these are bog or fen plants, so the phenomenon is self-explanatory. Here, however, is a prairie plant with a similar distribution, but, since prairie habitats are not confined (in this part of Iowa) to these four counties, as are the bog and fen habitats, this *Astragalus* is also found in the three adjacent (east-west) counties, making a unique type of distribution. The counties represented (ISC, SUI, ILL, ISTC) are: Osceola, O'Brien, Dickinson, Clay, Emmet, Palo Alto, and Kossuth, forming a symmetrical block.

128. *Astragalus lotiflorus* Hook. Low milk-vetch.

—Grant 11607, Aug. 4, 1952, Plymouth Co., Joy Creek (NE30,91-48). A new county record for this typical Missouri Bluffs plant, which is now known in Iowa (ISC, SUI, ISTC) from each of the nine western border counties except Sioux Co. There is also one interior collection: Duane Isley, Palo Alto Co., Dewey's Pasture (ISC). Cratty (1933) also reports it from Decatur Co.

Two of Shimek's early collections identified as *A. plattensis*, belong to this species: Monona Co., Turin, dry hills; and Harrison Co., Missouri Valley, south ridge prairie; both collected May 15, 1909 (SUI). I have seen no specimens of *A. plattensis* from the state.

128. *Astragalus missouriensis* Nutt. Missouri milk-vetch.

—Grant 11617, Aug. 4, 1952, Plymouth Co., Joy Creek (NE30,91-48), loess bluff. I have found only three other Iowa collections (SUI) of this plant, apparently confined here to Plymouth and Woodbury Counties. The species is not included in Cratty's list (1933).

128. *Astragalus striatus* Nutt. Striated milk-vetch.

Another western milk-vetch, known only from two Iowa localities. The first is the prairie top of Ocheyedon Mound, Osceola, Co.: Fitzpatrick, July 19 and Aug. 14, 1904 (ISC); Shimek, July 10, 1912 (SUI); and Conard, July 18, 1923 (ILL). There is also a single collection from Harrison Co.: Shimek, June 13, 1909, Missouri Valley, Paper's Field, loess hill (SUI). Fernald (1950) does not include Iowa in the range of this western plant.

128. *Petalostemon villosus* Nutt. Silky prairie-clover.

—Grant 11197, July 17, 1949, Black Hawk Co., n. edge of Waterloo, sandy prairie. This is a new species record for the state. The plant is conspicuously silky-villous, which will distinguish it from any species of the genus in the Gray's Manual range. Also, the pink petals and the numerous

leaflets (6 pairs or more) will separate it from all other Iowa species. *P. purpureus* has a much-brighter crimson corolla.

I see no reason to suspect the clump to represent an introduction, in spite of the area being surrounded by housing developments. This minute prairie area appeared undisturbed, with numerous typical sandy-prairie plants in the immediate vicinity. The species is common in four adjacent states (Wisconsin, Minnesota, South Dakota, and Nebraska), which together more than half surround Iowa.

132. *Linum rigidum* Pursh. Stiff flax.

—Grant 11611, Aug. 4, 1952, Plymouth Co., Joy Creek (NE 30,91-48), loess bluff; Grant 11627, Aug. 5, 1952, Woodbury Co., Sioux City, Stone Park, loess bluff; O. M. Olson, July 1, 1904, Woodbury Co. (ISC); Hitchcock, n.d. Woodbury Co., Sioux City (SUI); Shimek, nw. corner of Lyon Co., Aug. 6, 1896, as "*L. sulcatum*" (SUI).

Goodman (1940) reported this species from Monona Co., and these records add three more counties to its published Iowa range.

133. *Linum sulcatum* Riddell, forma **albiflorum**, forma **nova**, White-flowered furrowed flax.

A forma typica recedit, corolla alba. Like the typical form of the species, but with the corolla white instead of yellow. —Grant 11247, Aug. 8, 1949, Osceola Co., s. side of Iowa Highway 9, 4.5 miles w. of Ocheyedon, high prairie. (Type in Iowa State Teachers College Herbarium, cotype in Chicago Nat. Hist. Mus.). Ronald L. McGregor, of the University of Kansas, tells me he has seen this form in his state.

168. *Impatiens pallida* Nutt. f. *dichroma* Steyerl. Pale touch-me-not.

—Grant 11709, Aug. 22, 1952, Winneshiek Co., Kedallville, Upper Iowa River bank (NW 33,100-10), with the upper and lateral petals white, and the posterior petals and the saccate sepal pale yellowish. This odd color-form apparently has not been recorded from Iowa.

227. *Panax quinquefolius*. L. Ginseng.

—Grant 11192, Emmet Co., July 14, 1949, High Lake (NENW 14,98-33), oak-hickory woods. Cratty (1905) and Wolden (1934) reported this from Emmet Co., but no specimens from it are in the four herbaria examined. There are sheets from twenty counties, northeast of a line from Dickinson, Cherokee, Webster, Boone, Iowa, and Washington to Lee. It has also been reported from Clay and Cedar Cos.

246. *Menyanthes trifoliata* L. var. *minor* Raf. Buckbean.

—Grant and Thorne 11704, Aug. 21, 1952, Winnebago Co., 1.5 m. s. of Lake Mills (N 15,99-23), peat bog. This is one of the few northern plants found in the other three of the Lake Counties (Emmet, Clay, Palo Alto), that has not yet turned up in Dickinson Co. There are available specimens (ISC, SUI) from seven other northern counties: Webster, Hamilton, Winnebago, Hancock, Worth, Cerro Gordo, and Allamakee. It has also been recorded by Pammel (1909) from Wright Co.

254. *Monarda fistulosa* L. var. *mollis* (L.) Benth. f. *albiflora* (Farw.) Sherff. White-flowered wild bergamot.

This white-flowered form of the normally lilac or pink-petalled plant is represented by two specimens: G. H. Berry, July 5, 1911, Linn Co., Cedar Rapids, Vernon Heights, "this should have varietal rank as ten plants from seed all had white blossoms" (SUI); and Grant 11567, July 28, 1952, Dick-

inson, Co., prairie w. of Laboratory (SESE 17,99-37). The genetic, rather than environmental, nature of this color difference is amply demonstrated by the report of Berry's experiment.

270. *Galium labradoricum* Wieg. Labrador bedstraw.

—Grant 11700, Aug. 21, 1952, Winnebago Co., 1.5 m. s. of Lake Mills (N 15,99-23), peat bog. This northern species was known previously in Iowa only from Buffalo Slough, Mason City, Cerro Gordo Co.: Shimek, July 7, 1896, as "*G. trifidum*", and Sept. 11, 1925, as "*G. palustre*" (SUI).

271. *Sambucus pubens* Michx. Red-berried elder.

—Grant 11740, Aug. 22, 1952, Winneshiek Co., Bluffton, Upper Iowa River bluff (SW10,99-9), fir-oak forest. This is an additional collection of a northern shrub, known (ISC, SUI) in Iowa from seven northeastern counties: Cerro Gordo, Winneshiek, Allamakee, Clayton, Delaware, Dubuque, and Jackson.

276. *Campanula americana* L., forma **albiflora**, **forma nova**. White-flowered tall bellflower.

A forma typica recedit, corolla alba. Like the typical form of the species, but with the corolla white instead of blue. —Grant 11193, July 14, 1949, Emmet Co., Iowa, High Lake (NENW 14,98-33), oak-hickory forest (Type in Iowa State Teachers College Herbarium); Shimek, Aug. 5, 1919, Allamakee Co., Stone House ne. of Postville, wooded bluff, "flowers white" (SUI); Shimek, Aug. 12, 1930, same locality, "flowers white" (SUI). As these last two sheets indicate, collected at the same place eleven years apart, this color form, as with most examples of flower albinism, tends to persist. And, as is also true of most albino forms, the flowers, in drying, tend to take on a pale version of the typical hue. Thus such forms are rarely recognized from dried specimens.

276. *Campanula americana* L. var. *illinoensis*, (Fresn.) Farw. Tall bellflower.

This variety, with the lower leaves broad, ovate, and abruptly contracted into a petiole, is represented (SUI) by three specimens collected by Shimek: Hardin Co., Sept. 11, 1927, wooded bluffs along the Iowa River; Cerro Gordo, Co., July 7, 1896, Mason City; Johnson Co., July 17, 1911, Confals, upland woods. There are also a few sheets which are intermediate between this and the much-more-abundant typical variety.

276. *Lobelia siphilitica* L. f. *albiflora* Britt. White-flowered great lobelia.

Three Iowa collections are at hand: F. Reppert 150A, Muscatine Co., 1892, "var. alba" (SUI); Without name, Johnson Co., 4 mi. n. of Iowa City, hanging bog near road 161, "albino" (SUI); Grant 11773, Sept. 14, 1952, Black Hawk Co., Golinvaux Slough (Sec. 9,89-13), edge of marsh, "corolla white". Another sheet has the notation "corolla blue, sometimes white"; H. A. Anderson, 1899, Cerro Gordo Co., Clear Lake (SUI).

Bibliography

1. Anderson, W. A. 1943 A fen in northwestern Iowa. *Amer. Midl. Nat.* 29:787-791.
2. Ball, Carleton R. 1899 (1900). The genus *Salix* in Iowa. *Iowa Acad. Sci. Proc.* 7:141-154.
3. Barnes, W. B.; Reppert, F.; Miller, A. A. 1900-1901. The flora of Scott and Muscatine Counties. *Dav. Acad. Sci. Proc.* 8:199-287.
4. Blake, S. F. 1952. *Wolffia papulifera* in Texas. *Rhodora* 54:306-307.

5. Conard, H. S. 1938 (1939). The fir forests of Iowa. *Iowa Acad. Sci. Proc.* 45:69-72.
6. Conard, H. S. 1951. *Plants of Iowa*, 7th ed. Grinnell, Iowa: Author. 94 pp.
7. Cratty, R. I. 1905. The flora of Emmet County, Iowa. II. *Iowa Nat.* 1:36-38.
8. Cratty, R. I. 1933. The Iowa flora. *Iowa State Coll. Jour. Sci.* 7:177-252.
9. Easterly, N. W. 1951 (1952). The flora of Iowa County. *Iowa Acad. Sci. Proc.* 58:71-95.
10. Fay, Marcus J. 1951 (1952). The flora of Cedar County, Iowa. *Iowa Acad. Sci. Proc.* 58:107-131.
11. Fernald, M. L. 1950. *Gray's Manual of Botany*, 8th ed. N. Y.: Amer. Book. 1632 pp.
12. Fitzpatrick, T. J. and M. F. L. 1899 (1900). The Orchidaceae of Iowa. *Iowa Acad. Sci. Proc.* 7:187-196.
13. Gilly, Charles; McDonald, Malcolm. 1936 (1938). Rare and unusual plants from south-eastern Iowa. *Iowa Acad. Sci. Proc.* 43:134-149.
14. Gilly, Charles; McDonald, Malcolm. 1947, 1948 (1949). A preliminary report on the flora of southeastern Iowa. I, II. *Iowa Acad. Sci. Proc.* 54:107-126; 55:115-133.
15. Goodman, George J. 1939 (1940). Plants new to Iowa. *Iowa Acad. Sci. Proc.* 46:105-106.
16. Hayden, Ada. 1943. A botanical survey in the Iowa Lake region of Clay and Palo Alto Counties. *Iowa State Coll. Jour. Sci.* 17:277-415.
17. Pammel, L. H. 1909. Flora of northern Iowa peat bogs. *Iowa Geol. Surv. Ann. Rept.* 19:735-777.
18. Pammel, L. H. 1923 (1924). The flora of Pine Hollow, Dubuque Co., Iowa. *Iowa Acad. Sci. Proc.* 30:263-277.
19. Shimek, B. 1906. The plants of Winneshiek County. *Iowa Geol. Surv. Ann. Rept.* 16:147-211.
20. Shimek, B. 1915. The plant geography of the Lake Okoboji region. *Iowa Univ. Lab. Nat. Hist. Bull.* 7(2):1-90.
21. Shimek, B. 1917. The plant geography of the Lake Okoboji region: additional notes. *Iowa Univ. Lab. Nat. Hist. Bull.* 7(4):3-5.
22. Taylor, Mrs. H. J. 1927 (1928). The history . . . of yellow . . . lotus. *Iowa Acad. Sci. Proc.* 34:119-124.
23. Wolden, B. O. 1932 (1934). The plants of Emmet County, Iowa. *Iowa Acad. Sci. Proc.* 39:89-132.

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