

NOTES ON THE DISTRIBUTION OF SOME VASCULAR PLANTS OF NORTHERN ILLINOIS

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ABSTRACT

Collection data and notes concerning geographic distribution are provided for 28 vascular plant species of Northern Illinois that are vouchered in the herbarium at Northern Illinois University (DEK). One species, *Solanum villosum*, is reported from Illinois for the first time.

NOTES ON THE DISTRIBUTION OF SOME NORTHERN ILLINOIS VASCULAR PLANTS

Beginning with the growing season of 1971 and continuing to the present my students and I have actively engaged in adding to the herbarium holdings at DEK. The emphasis has been to acquire a complete as possible assemblage of the local flora, primarily for teaching purposes. As a result of this activity several taxa have been added to the known vascular flora of our immediate area, DeKalb County, as well as to the flora of the region and the state. It is my purpose to report here the accumulated records on these rare or noteworthy vascular plants.

Our efforts to keep abreast of an understanding and recognition of our flora have been greatly aided by the distribution information contained in the various editions of *Plants of the Chicago Region*, by Floyd Swink of the Morton Arboretum. The "3rd" and latest edition, by Swink and Wilhelm (1979), described as the "Revised and Expanded Edition," has been particularly useful because it goes beyond the checklist format to include keys and many taxonomic notes. We are fortunate that Swink and Wilhelm include DeKalb County in their circumscription of the "Chicago region."

We have also found useful the "Checklist of the Vascular Flora of Illinois" with its two addenda, by Robert H. Mohlenbrock (1976A, B, & 1977). At the present time this checklist is available only in mimeograph copy.

Taxa reported below are arranged alphabetically by genera followed by data

on location, habitat, collector, collector's number, and date. For most taxa I have provided a brief discussion pertaining to their occurrence and taxonomy. Unless otherwise stated the species are additions to the known flora of the counties given. One species, *Solanum villosum*, is reported as new to Illinois. Voucher specimens are on deposit at DEK. When available duplicates have been or will be deposited at MOR and ISM. Taxa presumed not native to Illinois bear an asterisk preceding their name.

**Acer pseudoplatanus* L.

DeKalb Co. Adventive in fence-row along Fairview Dr., DeKalb city; soil fine-textured. *Sörensen* 7273, 16 Oct 1972. This species has not previously been reported as adventive or escaping cultivation in Illinois. Fernald (1950), who spells the specific epithet, "Psuedo-Platanus," lists the species as freely escaping but does not provide a geographic range in NEUS. Rehder (1951) indicates the species is native in Europe and Western Asia, and gives its English name as Sycamore Maple. I have watched this population over the years and it has decidedly increased with many different sizes and ages of plants present indicating repeated "seeding-in"; however, I doubt it poses a threat as a nuisance species. The parent is a large specimen (8 m, DBH 0.8 m) planted many years ago in nearby Fairview Cemetery as an ornamental and shade tree.

Androsace occidentalis Pursh

DeKalb Co. Ledges created by flagstone slope along S bank of Watson Creek on the campus of Northern Illinois University; scattered in open patches of accumulated fine-textured soil among flagstones. *Sörensen et al.* 8118B, 16 Apr 1981. The habitat where this species was collected dates from its construction in 1972. Since then the site has become thoroughly colonized by adventives and occasionally by such interesting natives as this one.

Arenaria stricta Michx.

DeKalb Co. Thin soil on limestone ledges of an active quarry, 1 km S of Fairdale, 7 km W of Kirkland. *Sörensen & Muller* 7650, 23 Jul 1977. At this site also occur such notable species as *Isanthus brachiatus* and *Aster oblongifolius*. The former is listed below as new for DeKalb Co.

Asclepias lanuginosa Nutt

DeKalb Co. On the property of Mr. Donald Faivre, 10.4 km SE of DeKalb city along Somonauk Rd; S-facing slope of a gravelly moraine or kame. *Sörensen* 7028, 9 Jun 1971; & 7553, 23 Aug 1976. Although not new to the flora this population is of special interest because it flowers and fruits annually as I have observed on several visits to the site. Dr. Robert Betz, who has studied the genus *Asclepias* and is well-known for his enthusiasm concerning the prairie milkweeds in particular, has stated that *A. lanuginosa* is known to produce fruit only rarely and he attributes this fact to the possible extirpation of the pollinators. It is worthwhile, therefore, to observe that, at least here, the appropriate pollinators must still be present and the well-being of the population of this Illinois endangered species (Bowles, 1981) for the present seems assured.

**Asclepias speciosa* Torr.

DeKalb Co. 1.7 km W of DeKalb city along the CNWRR tracks; degraded prairie in RR right-of-way. *Sörensen* 8396, 17 Jul 1983. This species is a rare adventive introduced from the Great Plains arriving perhaps as a seed in the bedding straw of cattle cars at the time when cattle were still hauled by rail. Swink & Wilhelm (1979) report its occurrence in two other locations within the Chicago region. At the DeKalb Co site this species has hybridized freely with our local *A. syriaca*. Obvious individuals representing the F_1 generation can be seen as well as several that are likely the result of backcrossing to the parents. My judgement of intermediacy is based largely upon comparisons of flower size.

Aster cordifolius L.

DeKalb Co. Huber Park in DeKalb city, N end of park in wooded area near the CNWRR tracks, only a single plant seen. *Koehring* 64, 10 Oct 1978. The habitat for this species seems unusual inasmuch as Swink & Wilhelm (1979) describe it as a species of rich Sugar Maple forests and indicate its principal occurrence in the Chicago region is near Lake Michigan, especially in Berrien Co, Michigan.

Astragalus canadensis L.

DeKalb Co. Along W County Line Rd, 2.4 km N of Ill Rt 38, on E side of right-of-way; degraded prairie remnant. *Sörensen & Wade* 7577, 17 Sep 1976. Subsequent visits to this location have resulted in finding two additional plants. In recent years the DeKalb Co government has greatly reduced the amount of roadside mowing that was previously done which may account for the well-being of this population. Plants here have been observed to set fruit vigorously.

Carex garberi Fern.

Cook Co. Far S side of the City of Chicago, about 96th St in an open, intermittent, shallow wetland between the Norfolk & Western RR right-of-way and the residential area along Vanvlissingen Ave; moist to dry areas of small knoll forming an island in the wetland area; several plants seen. *Sörensen* 8232, 4 Jun 1982. Although not new to Cook Co this recent discovery of a viable population of this species is worth noting inasmuch as it is considered an Illinois endangered species (Bowles, 1981).

Carya illinoensis (Wang.) K. Koch

Ogle Co. Wooded terrace of the Rock R, about 10 km S of Oregon, on E side of river, E 1/2 of Sec 31, R 10 E, T 21 N, on the property of Mr. Albert Dahlberg. *Sörensen & Voth* 8339, 14 Oct 1982. This massive specimen (c 20 m, DBH 0.6 m) might have been overlooked had it not been for the fortuitous discovery of a limb that had been blown down in a storm. Enough leaves remained on the fallen branch for an identification and a voucher. There is always the likelihood that this specimen has been planted, but its great size argues against that possibility. The habitat and occurrence as described by Mohlenbrock (1973) fit the site where this one was growing.

Carya tomentosa Nutt.

DeKalb Co. Chief Shabbona County Forest Preserve, 2 km SE of Shabbona, upland forest of *Quercus alba*, *Q. macrocarpa*, and *Carya ovata*. *Kline & Sörensen*

103, 23 Jul 1980. Despite many previous visits to this site the Mockernut has been completely overlooked. In 1982 I made a reconnaissance of the forest and I now have concluded that Mockernut is, in fact, the prevailing hickory species present here. Moreover, there is abundant reproduction taking place as is evident from the numerous seedlings and young saplings present especially in the north and west part of the preserve. DEK also has a specimen from LaSalle Co (*Kukowski s.n.*, 13 May 1962), but specific location data are not given. Each represents a northward range extension beyond that shown by Mohlenbrock (1973).

Cornus alternifolia L.f.

DeKalb Co. Russell Forest Preserve, just S of Ill Rt 72 between Cenosa and Kirkland; rich upland woods with Sugar Maple, Basswood, and Bitternut Hickory among the most abundant canopy trees. *Muller 1487A*, Jul 1975. That this species should eventually turn up in DeKalb Co seems expected inasmuch as it is well-known from surrounding geographic areas and ample habitat for it can be found here.

Eleocharis obtusa (Willd.) Schultes

DeKalb Co. Kishwaukee Community College Campus, Malta; exposed shores of artificial pond, fine-textured substrate. *Sörensen 7587*, 28 Sep 1976. Since the collection reported here was made, the species has been sighted in a similar habitat, i.e., along the shores of an artificial pond, on the west campus of Northern Illinois University, and later also along the banks of Watson Cr that crosses the campus. Along the pond shores I have watched the populations "bloom" in the years just after the creation of the habitat, after which a marked decline coincided with the gradual colonization of the shores by perennial sedges and rushes. It is now not at all abundant at any of these sites.

**Erodium cicutarium* (L.) L'Her.

DeKalb Co. Campus of Northern Illinois University, disturbed open soil at SW corner of Davis Hall along Normal Rd. *Friberg s.n.*, 15 Oct 1981.

**Eriochloa villosa* (Thunb.) Kunth

DeKalb Co. About 20 km N of DeKalb city near jet with Annie Glidden Rd and Milwaukee Road RR tracks; gravelly ballast at edge of degraded prairie remnant. *Sörensen 7679*, 6 Oct 1977. At a later date, late 1978, this species was observed as a rank weed in a cornfield about 4 km S of the above site. The statement by Swink & Wilhelm (1979) that this species "has the potential of becoming weedy," seems prophetic. It gives every sign of having the phenology and woodiness of Fall panicum (*P. capillare*). Pohl (1959) reported this species as a potential weed in Iowa more than two decades ago. I am indebted to him for verification of the identity of our material.

**Holosteum umbellatum* L.

DeKalb Co. Campus of Northern Illinois University, about stonework at N end of Swen Parson Library (now the Law School); with *Lamium amplexicaule* and *Capsella bursa-pastoris*. *Sörensen 7623*, 11 Apr 1977.

Isanthus brachiatus (L.) BSP.

DeKalb Co. Thin soil on limestone ledges of an active quarry, 1 km S of Fairdale, 7 km W of Kirkland. *Sørensen & Muller 7651*, 23 Jul 1977.

Juncus bufonius L.

DeKalb Co. Exposed mud along shores of small pond on the campus of Kishwaukee Community College, Malta. *Sørensen 7610*, 9 Oct 1976. The population of this species has behaved much the same as that of *Eleocharis obtusa* (see above) with which it co-occurs. When first found it was quite abundant having reached a peak in numbers of plants. Since then the numbers have declined such that during the 1982 season it was not observed at all.

Kane Co. Moist sandy soil in the SE quadrant of the intersection formed by I-90 (Northwest Tollway) and Ill Rt 47. *Trager 51*, 5 Aug 1972.

Juncus dudleyi Wieg.

DeKalb Co. In moist gravelly and cindery soil just N of Pleasant St along a local RR spur (now abandoned) in the E part of DeKalb city. *Trager 27*, 13 Jul 1972. A second specimen at DEK (*Sørensen 7611*, 9 Oct 1976) was collected at the Kishwaukee Community College pond (see *J. bufonius*, above).

Juncus gerardi Loisel.

Cook Co. South of 103rd St along Stony Island Avenue extension (not a developed road) in the far south side of Chicago; depression of a poorly-drained and seasonally-inundated field where the vegetation has developed upon filled land. *Sørensen 8278*, 8 Jul 1982. As reported by Swink & Wilhelm (1979) this rare species of the Chicago region flora was collected by Glassman at 92nd and Stony Island Ave in 1956. Inasmuch as the earlier station is no doubt now destroyed I think it is worthwhile to report this newly-discovered site that lies 2.8-3.0 km S of the original Cook Co locality. There is, however, not a great deal of hope that the Cook Co populations of this species will remain long, since the site reported here is adjacent to active landfill areas and could be covered over at any time.

**Leonurus marrubiastrum* L.

DeKalb Co. Among sedges (*Carex stricta*) in a meadow developed on a terrace of the Kishwaukee River just W of Huber Park in the south sector of DeKalb city. *Sørensen 7586*, 27 Sep 1976; and just S of the CNWRR tracks and W of Annie Glidden Rd in SW DeKalb city; fine-textured fill with *Daucus carota*, *Acer negundo*, and *Morus alba*. *Sørensen 8333*, 18 Sep 1982. This infrequent and introduced weed seems now to have naturalized in our local flora.

Orobunche uniflora L.

DeKalb Co. Disturbed upland forest, SE corner of the Northern Illinois University campus, "the campus woods," near Ill Rt 38, in thickety undergrowth of *Ribes americanum*, *Cornus racemosa*, and *Lonicera tartarica*. *Sørensen 8021*, 6 Jun 1980.

Potamogeton natans L.

Cook Co. Clay-bottomed "borrow pit," 0.8-1.4 km S of US Rt 30 on W side of

I-57 in town of Mattheson, in shallow water among clumps of *Scirpus* and *Typha*.
Sörensen 7604, 2 Oct 1976.

Sambucus pubens Michx.

DeKalb Co. About 2 km NW of Kingston along the Kishwaukee R; E-facing springy seepage slope, with *Symplocarpus foetidus*, *Fraxinus nigra*, and *Carpinus caroliniana*. Sörensen & Matekaitis 7792, 8 May 1980.

Scirpus paludosus Nels.

Cook Co. At approximately 110th St near Stony Island Ave extension (not a developed rd) in the far south side of Chicago: muddy banks of a ditch or drain-way leading from the Norfolk & Western RR loading yard to the NE corner of Lake Calumet, through an area built up with cindery fill. Sörensen 8302, 10 Aug 1982. Swink & Wilhelm (1979) report this species from elsewhere in Cook Co. The taxon is listed as an Illinois endangered species (Bowles, 1981). The behavior of this species at the station reported here and as intimated by its similar ecology noted by Swink & Wilhelm suggest that the populations in Cook Co are of recent introduction from the western mountain states where it is abundant. Its occurrence in the Chicago region is quite likely a result of recently increased habitat based upon industrialization and associated wastes. In my opinion one can expect to see an increase in this species paralleling that of such tollway followers as *Typha angustifolia*.

**Solanum villosum* Mill.

DeKalb Co. Newly exposed cindery and gravelly soil of RR right-of-way at intersection of CNWRR and Nelson Rd, 3.2 km W of DeKalb city. Sörensen 8335, 25 Sep 1982. The occurrence of this Eurasian weed in Illinois is reported here for the first time (Mohlenbrock, 1976A, B, & 1977). Fernald (1950) gives its adventive range in NEUS as "Mass. south." Its habit is very similar to that of the common *S. americanum* but it is markedly different from that species by its dense, somewhat glutinous, hairy vestiture.

**Spergularia marina* (L.) Griseb.

DeKalb Co. Campus of Northern Illinois University, in fine-textured soil of parkway where grasses have been worn away by foot traffic, NW corner of Stevenson Residence Halls. Sörensen 8305, 11 Aug 1982. Swink & Eilhelm (1979) argue that populations of *Spergularia* in the Chicago region tend to share the characters used to separate *S. marina* and *media*. Based upon the habitat where these occur I would expect *S. media*, the introduced species (Fernald, 1950), to be the more prevalent. However, I have chosen to recognize *S. marina* as the correct name to apply to the present collection since the characters possessed seem quite clear: wingless seeds, short pedicels, narrow leaves in opposite pairs (not fascicled). Whatever are the merits of the uncertainty alluded to here, one thing seems sure, namely that our local plants are of recent introduction and should be considered naturalized rather than native.

Viola conspersa Reichenb.

DeKalb Co. Adventive in lawns and flower beds around my residence at the corner of Susan Ct & Sharon Dr in the far SW corner of DeKalb city; soil fine-

textured. *Sörensen 8120*, 4 May 1981. This species first appeared in 1975 in the shade beneath a small cultivated specimen of *Tsuga canadensis*. Since then it has spread freely into the Blue Grass lawn and among shrubs and cultivated perennials in flower beds. No doubt it has been introduced by me or has come along with potting soil of a garden plant. In any case it now seems happily established and I have not discouraged it.

Zannichellia palustris L.

DeKalb Co. Bullrun Cr in Kirkland, near passage beneath Ill Rt 72; muddy substrate, water shallow, with *Nasturtium officinale*. *Pooley 14C*, 29 Sep 1979. While this report of the Horned-pondweed is interesting in itself it is worthwhile to note that the occurrence in DeKalb Co of Water Cress is here first reported; however, no voucher for the latter exists at the present time.

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