

KALLSTROEMIA (ZYGOPHYLLACEAE) IN ILLINOIS

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ABSTRACT

The correct name for the Kallstroemia species which occurs in Illinois is K. parviflora Norton. Its distribution, spread, and disappearance in the state are discussed.

DISCUSSION

Jones and Fuller (1955), Jones (1963), Swink (1969), and Myers (1972) report the species of Kallstroemia known to occur in Illinois as K. intermedia Rydb. Kallstroemia intermedia, however, is a synonym of K. parviflora Norton, a species of disturbed areas in semiarid grasslands known from Colorado and Kansas south to central Mexico and west to Arizona (Porter, 1969a). Originally a semidesert plant, K. parviflora has been spread by man, first along the railroads and later along paved highways, to reach its present distribution. It has been spread eastward into disturbed habitats along railroad rights-of-ways and highways in Missouri (Porter, 1969b), Illinois, Mississippi, Maryland (Porter, 1970), and the District of Columbia (Hitchcock & Standley, 1919). Man also has dispersed K. parviflora to South America, where it is now a weed in western and central Peru.

Recent Illinois authors have indicated the comparative rarity of Kallstroemia parviflora in the state: "Railroad yards, occasional; adventive in Illinois. St. Clair Co., Eggert...." (Jones & Fuller, 1955, p. 299); "Railroad yards, occasional; adv. from southern U. S.; Blue Island, near Chicago, Cook. Co., Babcock; H. Eggert in St. Clair Co." (Jones, 1963, p. 101); "Introduced from the Southwest. In our area known only from Cook County, where it was collected before 1881 by Babcock along the Rock Island Railroad at Blue Island. His plant was a 'waif', and the species has no doubt long been absent from our living flora." (Swink, 1969, p. 230). The Babcock collection has not been seen, but the following Illinois specimens have been examined:

Cook Co.: Chicago, Moffatt 9507, 5 Sept 1896 (WIS); Brighton Park, Chicago, along C. & A. Railroad, Moffatt 458, 5 Sept 1896 (SMU, UC), waste ground, Umbach, 5 Sept 1896 (POM), dump, Umbach, 17 Aug 1897 (UC). Macoupin Co.: near Brighton, along C. & A. Railroad, Moffatt 498, 1 Sept 1893 (WIS). St. Clair Co.: Duste Platze, Eggert, Aug 1882 (MO). East St. Louis, Eggert, 8 Aug 1897 (PENN), Letterman, 24 July 1899 (MO), bones factory, Eggert, 8 Aug 1897 (DS, F, MO, NY, TEX, UC, US), B. & O. Railroad up island, Eggert, Aug 1884 (MO). Without locality (probably St. Clair Co.): Eggert, Aug 1882 (UMO); railroad dikes, Eggert, Aug 1882 (UC).

It is interesting to note that all the specimens cited were collected in the 19th Century from about 1881 to 1897. Kallstroemia parviflora apparently has not occurred in the state in this century.

Prior to the mid-1890's, weed removal on railroad rights-of-way was by hand, a time-consuming and expensive operation that also allowed seeds to be dislodged, germinate, and form more weeds. In 1894, probably the first weed-burning car was introduced by the Minneapolis, St. Paul, & Sault Ste. Marie Railway (Camp, 1904). Being more efficient and much less expensive to operate than hand-weeding, weed-burning cars rapidly took over that chore. Today, the latter have been supplanted by cars that spray diesel oil or other, more exotic, chemicals. It is probable that Kallstroemia parviflora was omitted from the flora of Illinois as a result of this technological progress.

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