

Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 32.

January, 1930.

No. 373.

ASTER AMETHYSTINUS AN OBVIOUS HYBRID

H. C. BENKE

(Plate 192)

ALTHOUGH no positive proof through experiment has come to my notice, yet, in view of personal experience with the very pretty and rare *Aster amethystinus* Nutt., I feel quite safe in declaring it to be a hybrid. Hybridism has long been suspected, so it is well to add my own observations here. The genus *Aster* is a favorite of mine and I have had opportunity for nearly thirty years to study it in the field, especially in the Central States, where the species under discussion grows. In that long period of time and among vast numbers of asters seen, only on three occasions was *Aster amethystinus* found.

1. While waiting for a train at the station at Kaukauna, Wisconsin, fifteen years ago, a field of asters was noted along a ditch or canal some 100 feet to the north. Walking closer to the plants, I came upon a large, bushy, vigorous-growing plant of the species under consideration. There were numerous plants of *A. novae-angliae* L. about, for this species is common in the region. Of *A. multiflorus* Ait.¹ there were but a few plants, for it was rare in that locality, but they were quite close by—not more than five feet away. Sample branchlets of the plant were obtained for the herbarium. There was but a single plant in evidence. It is my number 767, Kaukauna, Wisconsin, 1914, and is now in the Public Museum of Milwaukee.

¹ This aster, so well known as *A. multiflorus* Ait., appears to be the original Linnaean species *Aster ericoides* L. Sp. Pl. 875. 1753. See Mackenzie, RHODORA 28, p. 65. 1926.

2. Many thousands of wild asters were seen through the succeeding years in Wisconsin, Illinois, Missouri, Kansas, and other states, all in its range, but not until October 2, 1926, did I come upon another specimen, which was found growing in the edge of a Chicago suburb on a bit of original prairie. This is my number 4316 in the herbarium of Field Museum. With the sheet is placed another giving samples of species in closest proximity and bearing a notation, in part, as follows:

"*Aster amethystinus* Nutt., no. 4316, was found growing in a vacant lot about one-half mile south-east of the railroad station at Edison Park, a suburb north-west of Chicago.

"On this sheet are aster species found growing in proximity—the only species within a hundred feet or so.

"A. *Aster multiflorus* Ait., plants within five feet north and also south of No. 4316; and B. *Aster novae-angliae* L., a few plants a bit farther north and north-east of same. The only other species in proximity was C. *Aster ericoides* L., var. *villosus* T. & G.

"The characteristics of No. 4316 are so evidently an average between A and B in every way that one may regard *Aster amethystinus* as a hybrid with constant qualities between the two, No. C being out of the reckoning."

3. It was two years later, on September 29, 1928, that I came upon my third specimen in an extensive field of original prairie,¹ several miles to the north-east of the locality previously mentioned, about Norwood Park, another suburb of Chicago. Specimens of branchlets were again obtained—my No. 4868 in the herbarium of Field Museum.

A photograph, submitted herewith (plate —), was taken in the field showing one of the tufted branches of *Aster amethystinus* at the right in the picture, other branches—not shown—being widely spreading or reclined, while a plant of *A. novae-angliae* is growing quite close by with *A. multiflorus* somewhat farther removed, as indicated in the left of the picture.

To summarize the evidence: In each case there was but a single plant (or tuft, branching from the base), the herbarium specimens on file being but branchlets or off-shoots and not complete plants.² The plants were all out of the range of *A. oblongifolius* Nutt., which

¹ It is to be regretted that this fine field of virgin prairie plants is being destroyed by a large colony of workmen, camping there with their horses.

² It was my good fortune to be able to revisit the site of the second plant discussed each fall since 1926, and I found the plant persisting, but it is still the single plant it was when first seen, no other plants having appeared to this time.

does not occur in the regions cited, a species with which it might be confounded except for its strict habit as seen in the field and its occurrence as solitary and rare plants—a second specimen was not to be found in the neighborhood in any case cited. It might be overlooked, however, because of other similarities in regions where *A. oblongifolius* is common—the Illinois and Wisconsin banks of the Mississippi River, for example. The presence in close proximity of the two species before mentioned in each case observed and the strikingly intermediate characteristics of the plant between the two furnish added circumstantial evidence that this charming aster may, with good reason, be regarded as a hybrid.

CHICAGO, ILLINOIS.

EXPLANATION OF PLATE 192

ASTER AMETHYSTINUS (right) with *A. MULTIFLORUS* (left) and *A. NOVAE-ANGLIAE* (center).

A NEW FORM OF *ASTER AMETHYSTINUS*.—On October 5, 1924, while in the western part of Worcester, Massachusetts, on a quest of *Aster amethystinus*, I found a group of plants, with altogether some thirty stalks, all bearing pink-rayed flowers, a specimen living plant of which has been placed in the Botanic Garden at Cambridge. This plant, elsewhere unknown, is here proposed as

ASTER AMETHYSTINUS Nutt., f. **leucerythros**, n. f., ligulis roseis.—MASSACHUSETTS: along remnants of old wall once a boundary of Liberty Farm of Abby Kelly Foster fame, Worcester, October 5, 1924, *E. W. Bemis* (TYPE in Gray Herbarium).—EARL W. BEMIS, Worcester, Massachusetts.

SOME ADDITIONS TO THE NEWFOUNDLAND FLORA.—The summer of 1929 from mid-June to mid-September I botanized in southwestern Newfoundland while my husband fished the salmon streams. Mr. Richard P. Whittington from his headquarters at Spruce Brook furnished us cabins on Barachois Brook, Harry's Brook and Highlands Pond successively.

Professor Fernald had said "Bring back anything rare or interesting"—a puzzling commission to an amateur guided only by the manuals published several years ago. And I frequently put specimens to press with a feeling that, absorbingly interesting as they were to



Benke, H. C. 1930. "Aster amethystinus an obvious hybrid." *Rhodora* 32, 1–3.

View This Item Online: <https://www.biodiversitylibrary.org/item/14502>

Permalink: <https://www.biodiversitylibrary.org/partpdf/123808>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.