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Volume 70 | Annual Issue | Article 12

1963

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Recommended Citation

Pohl, Richard W. (1963) "Cytological and Distributional Note on Thladiantha dubia (Cucurbitaceae)," *Proceedings of the Iowa Academy of Science, 70(1),* 58-60.
Available at: https://scholarworks.uni.edu/pias/vol70/iss1/12

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Pohl: Cytological and Distributional Note on Thladiantha dubia (Cucurbi

Compositae		
Conyza canadensis (L.) Cronq.	F	8
Cirsium sp.	P	2
Gramineae		
Agrostis alba L.	P	17
Eragrostis pectinacea (Michx.) Nees	F	2
E. cilianensis (All.) Lutati.	F	4
Poa compressa L.	P	4
Leguminosae		
Cladrastis lutea (Michx.) K. Koch	T	1
Plantaginaceae		
Plantago sp.	L, P	4
Rosaceae		
Potentilla norvegica L.	F	7
Ulmaceae		
Ulmus americana L.	T	2

Cytological and Distributional Note on *Thladiantha dubia* (Cucurbitaceae)[1]

RICHARD W. POHL[2]

Abstract. Thladiantha dubia, an Asiatic perennial Cucurbit, was found growing in northern Minnesota. The chromosome number is N=9.

The Asiatic cucurbit, *Thladiantha dubia* Bunge, was reported in the 8th edition of Gray's Manual as an escape from cultivation in the area from Quebec and New Hampshire to Manitoba. Very few exotic cucurbits are hardy in such northerly latitudes. During the past summer I encountered this species growing semi-wild in northern Minnesota.

Thladiantha plants are rather ornamental, producing campulate yellow flowers in profusion. The vines are perennial from deep-seated cylindrical tubers. The species is not available in the American horticultural trade, and the plants apparently become established from tubers which pass from hand to hand. We have grown a staminate vine from such a tuber obtained from the locality cited below. The vine grows rapidly and flowers profusely in the greenhouse. If it proves possible to secure the pistillate form of the species, these plants would be valuable as teaching examples of the Cucurbitaceae. Since there is no available illustration of this species in American literature, I have included a drawing of the plant (Figure 1).

The chromosome number of *Thladiantha dubia* was reported by Kozhuchow[1] as 2N=18 from somatic material. We have been able to obtain a meiotic count of N=9 from microsporocytes

[1] Journal Paper No. *J-4552* of the Iowa Agricultural and Home Economics Experiment Station, Ames, Iowa. Project No. 1136. The facilities of the Iowa State University Herbarium, supported by the Industrial Science Research Institute, were used in the preparation of this paper.

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Published by UNI ScholarWorks, 1963

(Figure 2). The chromosomes are small and difficult to stain. A voucher speciman, cited below, is in the Iowa State University Herbarium. I am indebted to Dr. L. I. Nevling of the Arnold Arboretum for confirmation of the identity of the specimen.

Figure 1. Vine tip and staminate flowers; note paired stamens and the appendage in the base of the corolla

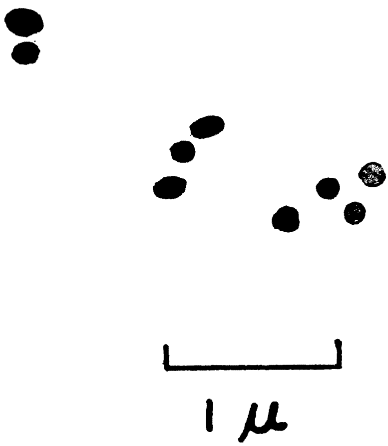

Figure 2. Meiosis I. Rule in 10 microns long

Thladiantha dubia Bunge. MINNESOTA: Cass Co.; yard of the Whittle Shop, near Whipholt, along Hwy. 34. Richard W. Pohl 9060 (ISC;A; BH).

Literature Cited

1. Kozhuchow, Z. A. 1934. Journ. Inst. Bot. Acad. Sci. Ukraine 9:71-73 (German summary).

The Vegetation of the Glacial Border During the Wisconsin Maximum

L. J. Eilers[1]

Abstract: The climate of the glacial boundary during the Wisconsin maximum was generally cooler and moister than at present. There is some evidence that a frost climate prevailed for some time at the glacial margin, suggesting that a tundra-like vegetation existed there. Pollen profiles indicate that a *Picea-Abies* forest existed south of the glacial margin and probably extended up to it during periods of climatic amelioration.

Botanists interested in the evolutionary development of plants soon encounter the problem of their past distribution. Those studying the development of the midwestern flora must give major consideration to the fact that all of Iowa has been glaciated at least once and most of it several times during the Pleistocene epoch. A number of questions immediately arise. What happened to the existing flora during a glacial advance? What factors affected the nature and the distribution patterns of the vegetation during the maximum extent of the glaciations? What

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