TORREY BOTANICAL CLUB

(1) BULLETIN

A monthly journal devoted to general botany, established 1870. Vol. 49, published in 1922, contained 408 pages of text and 17 full page plates. Price \$4.00 per annum. For Europe, \$4.25. Dulau & Co., 47 Soho Square, London, are agents for England.

Of former volumes, 24-47 can be supplied separately at \$4.00 each; certain numbers of other volumes are available, but the entire stock of some numbers has been reserved for the completion of sets. Single copies (40 cents) will be furnished only when not breaking complete volumes.

(2) MEMOIRS

The Memoirs, established 1889, are published at irregular intervals. Volumes 1–17 are now completed. The subscription price is fixed at \$3.00 per volume in advance; Vol. 17, containing Proceedings of the Semi-Centennial Anniversary of the Club, 490 pages, was issued in 1918, price \$5.00. Certain numbers can also be purchased singly. A list of titles of the individual papers and of prices will be furnished on application.

(3) Preliminary Catalogue of Anthophyta and Pteridophyta reported as growing within one hundred miles of New York, 1888. Price, \$1.00.

Correspondence relating to the above publications should be addressed to

Mrs. Helen M. Trelease

Box 42 Schermerhorn Hall,

Columbia University,

New York.

Vol. 27

September-October, 19

TORREYA

A BI-MONTHLY JOURNAL OF BOTANICAL NOTES AND NEWS

EDITED FOR

THE TORREY BOTANICAL CLUB

BY

GEORGE T. HASTINGS



John Torrey, 1796-1873

CONTENTS

A Botanical Riddle, Kenneth K. Mackenzie	81
A Green Form of Trillium Sessile, LEONARD K. BEYER	
New Species from the Blue Ridge, P. A. RYDBERG	
A New and Remarkable Habitat for the Endemic Florida Yew, HERMAN KURZ.	90
A New Nyssa from Florida, John K. Small	92
A New Chamaesyce from Florida, John K. Small	93
A New Oak from the Green River Eocene, T. D. A. COCKERELL	94
News Notes	95

PUBLISHED FOR THE CLUB
At 8 WEST KING STREET, LANCASTER, PA.
BY THE INTELLIGENCER PRINTING COMPANY

Entered at the Post Office at Lancaster, Pa., as second class matter

teeth, and the calyx-lobes which are narrower and more gradually pointed.

VIRGINIA: Southwest slope of the Peak of Otter, Bedford County, July 1, 1925, Rydberg 9264 (N. Y. Bot. Gard.).

Explanation of Plates

PLATE 2. I. Hypericum Mitchellianum Rydb. × ½.—2. Calyx.—3. Petal.—4. Fascicle of stamens.—5. Pistil.—6. Fruit. × 2.—7. Hypericum graveolens Buckley. × ½.—8. Calyx.—9. Petals.—10. Fascicle of stamens.—11. Pistil.—12. Young fruit. × 2.

PLATE 3. I. Kneiffia latifolia Rydb. $\times \frac{9}{4}$.—2. Flower with petals removed.—3. Petal and 2 stamens. Nat. size.—4. Fruit. $\times \frac{9}{4}$.

PLATE 4. I. Stachys subcordata Rydb. $\times \frac{2}{3}$.—2, 3. Calyx.—4. Corolla.—5. Lip.—6. Stamens.—7. Pistil. $\times 2$.

New York Botanical Garden, New York, N. Y.

A NEW AND REMARKABLE HABITAT FOR THE ENDEMIC FLORIDA YEW.

HERMAN KURZ

Many botanists know that the Florida yew Taxus Floridana occurs somewhere along or in the vicinity of the Apalachicola River Bluffs. Very few, however, are able to lead straight to it, once they have arrived at the bluffs, so rare is it. Tumion taxifolium (stinking cedar) is well nigh ubiquitous along the bluffs. On the other hand, the yew, another endemic species of the same family, as Harper (2) points out is about 40 times as rare. Any new station for the latter is therefore in itself noteworthy.

In order to appreciate the peculiar or wanton distribution of the yew as shown by our recent discovery, a typical habitat for it 4½ miles a little east of south of River Junction on Flat Creek will first be briefly described. Here along the creek, but well above the water table, at least a dozen plants grow in a perfectly orthodox rich, though somewhat disturbed, mesophytic forest where one can pass freely and comfortably about. The forest soil here is a well aërated, only slightly acid (pH 6), sandy loam, supporting among others *Tumion taxifolium*, *Magnolia foetida*,

Quercus laurifolia, Fagus grandifolia, Pinus glabra, Ilex opaca, Symplocos tinctoria, and Vaccinium elliottii.

Now to the new locality. On February 12, 1927, Dr. R. M. Harper and the writer were guided about ½ mile into the fastness of Johnson's Juniper Swamp by Mr. L. R. Carson of Bristol. This swamp, already described and located as 8 miles south of Bristol by Harper (3) is totally unlike the Flat Creek habitat. The waterlogged, peaty substratum is highly acid (pH 4.2-4.5). Fallen logs in all stages of decay criss-cross so that exploration becomes very arduous. The luxuriant mats of a number of species of Hepaticae and Musci attest to the very humid atmosphere of this hydrophytic forest. Among the trees and shrubs, mostly evergreen, are: Magnolia virginiana, Cliftonia monophylla, Chamaecyparis thyoides, Pinus taeda, P. elliottii, Taxodium imbricarium, Nyssa biflora, Persea pubescens, and now and then on the higher accumulated peat a young Magnolia foetida. To our amazement in this contrasting habitat and among such strange associates, we found the supposedly very "selective" Taxus Floridana.

This swamp projects the Florida yew's range at least ten miles farther south, significant enough when it is realized that its hitherto known distribution is within an area of only about fifteen miles along the bluffs. Of special interest is the fact that Taxus floridana parallels the peculiar distribution of its northern relative Taxus canadensis in southern Ohio and according to Tansley (5, pp. 166ff, 250) its European relative, Taxus baccata, in England. The latter is abundant on the chalk uplands but occurs also in acid moors. Markle (4) reports T. canadensis as "one of the commonest undergrowth shrubs" in a cedar swamp of Champaign county five miles south of Urbana. Very commonly Taxus canadensis is found in shady mesophytic habitats of canyons and even in the dunes of Michigan. Such habitats are often circumneutral or alkaline in reaction. The plant lists given for the Cedar Swamp by Dachnowski (1) and Markle indicate circumneutral peat with local acid patches. But as no hydrogen ion data are available of the peat where T. canadensis grows comparison with the Florida juniper swamp is impossible. The sharp distinction between the edaphic factors of the juniper swamp and all other known habitats of the Florida yew and the striking parallel shown by its other relatives make the endemism of the former still more interesting if not more confounding.

FLORIDA STATE COLLEGE FOR WOMEN, TALLAHASSEE, FLORIDA.

Literature Cited

- 1. Dachnowski, A. A Cedar Bog in Central Ohio. The Ohio Naturalist, 11: 193-199. 1910.
- 2. HARPER, R. M. Geog. and Veg. of N. Florida. Ann. Rep. Fla. Geol. Surv. 6: 210-216. 1914.
- 3. . A Middle Florida Cedar Swamp. Torreya, 26: 81–84. Sept.–Oct. 1926.
- 4. Markle, M. S. The Phytecology of Peat Bogs Near Richmond, Indiana. Ind. Acad. Sci., 359-375. 1915.
- 5. Tansley, A. G. Types of British Vegetation. 1-416. 1911.

A NEW NYSSA FROM FLORIDA

JOHN K. SMALL

With the acquisition of another species of Nyssa to the North American flora, the two sections of the genus are evenly balanced with three species each. For many years the ratio was two and two. Then Nyssa acuminata of the coastal region of Georgia was added to the aquatica-ogeeche group. Three decades later the main subject of this note was added to the sylvatica-biflora group, which brought the ratio even again. The source of this gum is the Apalachicola River delta region where so many endemic species of flowering plants are harbored. It grows in company with Cliftonia monophylla and Cyrilla racemiflora, both of which it resembles in habit of growth. It may be named and described as:

Nyssa ursina Small, sp. nov. A shrub with much-branched stems and numerous branchlets or sometimes a small tree with a trunk a decimeter in diameter and a narrow much-branched crown: leaves numerous; blades elliptic, often narrowly so, to spatulate, 2.5–7 cm. long, coriaceous, usually rounded at the apex, entire, deep-green and somewhat shining above, much paler beneath, glabrous, at least at maturity, short-petioled: staminate racemes numerous on slender peduncles 1–2 cm. long; sepals ovate to suborbicular, about 1 mm. long, obtuse; anthers globose-ovoid to globose-reniform, nearly 1.5 mm. long, longer

than the filaments: pistillate flowers usually 2 together, sessile in an involucre of several acute pubescent bracts; sepals ovate or elliptic, 1.5–2 mm. long, obtuse, shorter than the campanulate hypanthium: drupe globular, 9–12 mm. in diameter, very fleshy, black under a bloom: stone oval or nearly so, 8–10 mm. long, with prominent rounded ribs.

Pineland swamps, Apalachicola River delta, Fla. The type specimens, in the herbarium of The New York Botanical Garden were collected by the writer in a swamp north of Port St. Joe, Florida, April 24, 1924, 11233 for flowers, and in swamps near Port St. Joe, November 27, 1923, 10995 for fruit.

The habit, an intricately branched stem with numerous branchlets, and the myriad globular drupes distinguish *Nyssa ursina* from *N. biflora*. In addition the small coriaceous narrow leaf-blades are not duplicated in any of our other species.

The specific name refers to the fact that the bears eat large quantities of the fruit in the fall and winter seasons.

A NEW CHAMAESYCE FROM FLORIDA

JOHN K. SMALL

The oölite limestone of tropical Florida—both the Miami and the Key West—harbors several endemic spurges of the genus Chamaesyce. Some, in habit resemble small kinds of thyme clinging closely to the rocks, others are merely diffuse, and still others are broom-like. All these kinds rejoice in the pinelands and shun the hammocks. It seems necessary to add another species, related to *Chamaesyce brachypoda*, to the endemic flora of the Everglade Keys.

Chamaesyce Mosieri Small sp. nov. Plant with several prostrate wiry, dark, partly shining stems or branches from the top of a woody perennial root, the branchlets wiry, villous-hirsutulous, leafy, irregular: leaves opposite; blades orbicular-reniform to ovate, 4–8 mm. long, acute or obtuse, entire, loosely pubescent, rounded or subcordate at the base; petioles purple or black-purple, pubescent: involucres axillary, campanulate, about 1 mm. long, sparingly pubescent, purple; glands transversely elliptic, about 0.4 mm. wide; appendages variable, some larger than the gland, others smaller, red or deep-pink, sometimes lobed: capsule about 1.5 mm. long, very broad, sparingly pubescent, the angles rather blunt when dry: seed ovoid, about 1 mm. long, the faces only slightly uneven.