

MONOSTROMA WITTRÖCKII IN OHIO¹

CLARENCE E. TAFT,
The Ohio State University,
Columbus, Ohio

On July 15, 1941, the Ichthyology class from the Franz Theodore Stone Laboratory, Put-in-Bay, Ohio, brought to the Laboratory a large collection of *Monostroma* which they had secured in the Portage River. Although it was immediately identified as a species of this genus it was almost unbelievable that this genus could occur in a freshwater stream so far from its usual marine or brackish water habitat.

During the summer of 1942 the writer visited the area with one of the original collectors but was unsuccessful in finding it although the stream was examined for several hundred yards in either direction.

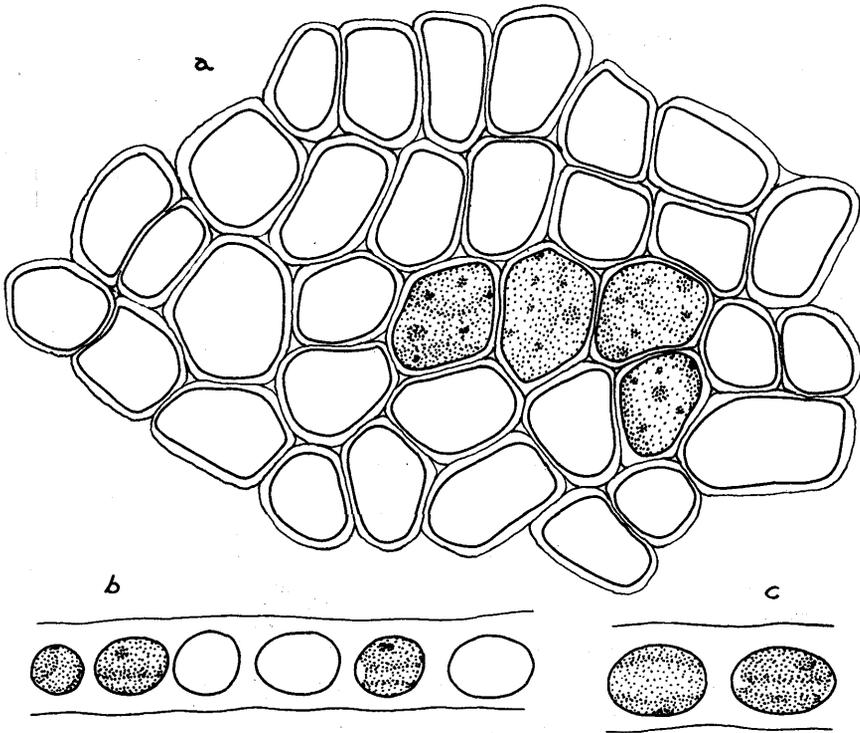


Fig. 1. *Monostroma Wittröckii* Bornet. (a) Cells in face view. (b and c) Cells in section from two parts of the same thallus.

The original discovery was made in that area of the Portage River which lies in Sec. 9, southern Harris Twp., Ottawa County, Ohio. This is about 16.5 miles west of Port Clinton and approximately 5 miles west and a little south of the village of Oak Harbor. The stream at that time had about 50% well defined

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riffles and the remainder pools with little or no current. The bottom was chiefly glacial gravel, boulders and silt. Some field and sewage pollution existed.² The algae, some of which was attached to sedges and unidentified weed stems, formed floating, gelatinous masses along the margin of a silted-bottom pool. The abundance (8 quarts in the collection) as well as the attached thalli attest to the fact that it was well established and that it was not the chance discovery of a few fragmentary scraps discarded accidentally or by design. One can only speculate on the events leading to its introduction into Ohio. Birds may have been responsible, but this seems very unlikely. Another possibility which seems more plausible, is that fragments or reproductive cells were brought in with sea food or with material used in packing such food. The fact that the river flowed through a quantity of trash and kitchen refuse discarded from a home about fifty yards above the area, lends credence to this theory. Its failure to reappear during the summer of 1942 may be due to the scouring of stream bottom and margins by spring floods.

Monostroma Wittrockii Bornet is listed by Taylor (1937) from a salt marsh in southern Massachusetts. In the young form it is attached and saccate. With age it splits more or less into a broad, irregularly lobed blade which is very fragile and breaks loose from its attachment. The blades in the Ohio material reached a length of about 12 cm. and were a pale green color and quite slippery. In parts of the thallus the cells may show a definite grouping into 2 and 4. The cells are angular, with fairly thick walls, and a diameter of 9-18 μ . Cells in section are rounded to oval, 9-12 x 11-15 μ . Thallus about 16-21 μ thick.

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CITATION

Taylor Wm. Randolph. 1937. Marine Algae of the Northeastern Coast of North America. Univ. Mich. Studies, Sci. Ser. Vol. 13, pp. 1-427. Pl. 1-60.

²Data pertaining to geographical location and stream conditions supplied by Mr. Milton B. Trautman, The Franz Theodore Stone Laboratory, Put-in-Bay, Ohio.