

A THIRD SPECIES OF *ENTEROMORPHA* (A MARINE CHLOROPHYCEAN) FOR OKLAHOMA

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Enteromorpha, primarily a marine genus, has been collected from several inland brine lakes and salt springs in the United States (1). The first report of the genus in Oklahoma was by Vinyard (2), who recorded *Enteromorpha prolifera* var. *tubulosa* (Kütz.) Reinbold from collections made at Great Salt Plains Reservoir, Alfalfa County, Oklahoma. The second and only other report of the genus in this state was by Pfiester *et al.* (3), who recorded *Enteromorpha compressa* (L.) Greville from collections made at Canton Lake, Blaine County. The purpose of this note is to report a third Oklahoma species of the genus — *Enteromorpha torta* (Mert) Reinbold, collected from the Great Salt Plains Reservoir on October 22 and December 4, 1976. The collection site was on the shore line immediately south of Nescatunga.

The Great Salt Plains Reservoir operates at conservation pool conditions nearly year round. The conservation pool, with an average shore line of 41 miles, stands 1125 feet above sea level and holds on the average 37,500 acre-feet of water. Tests made by the Corps of Engineers on September 25, 1976 determined the salt (chloride) content of the reservoir to be 3000 ppm and the pH to be 7.9 (4).

Thalli of *E. torta*, which are attached when young and usually free floating when older, form hollow tubes one cell layer in thickness when mature. The cells, each of which contains one chloroplast and is uninucleate, are mostly angular by mutual compression and are separated by walls of medium thickness. This species, like most fresh water forms of the genus, is highly branched. The filaments of *E. torta* somewhat resemble the fronds of *E. percursa*, but the cells in the latter are more symmetrically arranged (5).

Unialgal cultures have been placed in the University of Texas Culture Collection, formerly known as the Indiana University Culture Collection.

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REFERENCES

1. C. E. TAFT, Ohio J. Sci. 64: 272-4 (1964).
2. WM. C. VINYARD, Southwest. Nat. 11: 196-204 (1966).
3. L. S. PFIESTER, O. P. FELKNER and W. O. FELKNER, Proc. Okla. Acad. Sci. 56: 66 (1976).
4. Data Sheet, Corps of Engineers Office in Tulsa, Oklahoma, giving results of tests run on the Arkansas River Basin.
5. F. S. COLLINS, *The Green Algae of North America*, Tufts College, Mass., 1909.