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# ENTEROMORPHA, A MARINE ALGA IN OKLAHOMA

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*Enteromorpha* is primarily a marine genus that has been collected from several inland brine lakes and salt springs in the United States (1, 2). The first and only report of the genus in Oklahoma was by Vinyard (3), who recorded *Enteromorpha prolifera* var. *tubulosa* (Kutz.) Reinbold from collections made at Great Salt Plains Reservoir, Alfalfa County, Oklahoma. The purpose of this note is to report collections of *Enteromorpha compressa* (L.) Greville from Canton Lake, Blaine County, Oklahoma in June, July, and August, 1975.

Canton Lake is confined by a dam in Blaine County. A stilling basin behind the dam is bounded at one end by the dam itself and at the other end by granite and limestone boulders. A shallow stream, 1 to 4 inches deep, trickles from the boulders. Rocks broken from these boulders are found in this stream as are decaying fish, discarded food, and cans left by fishermen. *Enteromorpha compressa* was collected in abundance from this stream in June, July, and August, 1975. Taft (2) reported *Enteromorpha intestinalis* (L.) Greville from a stream 1 inch deep over limestone. The *E. compressa* collected at Canton Lake was attached to rocks and pebbles while that reported by Taft was free floating.

Mature thalli of *Enteromorpha* form hollow tubes with a wall one cell in thickness. Tubules of species growing in salt water are usually simple, but those growing in fresh water are usually highly branched. *Enteromorpha compressa* collected from Canton Lake formed crisped, contorted tubes 20 to 60 cm. long with numerous branches. Cells measuring 11-15  $\mu$  m in diameter were in no definite order. The membrane was thin. Unialgal cultures of *E. compressa* were obtained by isolating portions of tubules into defined marine media developed by Abbott (personal communication) and maintaining them at 20 C on a 12:12 LD cycle at 4,000 lux. These have been placed in the Culture Collection of Algae at Indiana University (IUCC LB2050).

Oklahoma has widely diverse habitats with many areas high in salt concentrations. *Enteromorpha,* a primarily marine genus, is probably more common in the state than previously believed. Collectors are urged to note and collect long algal strands or tubes floating or flowing in waters known to be high in salinity.

## ACKNOWLEDGMENT

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### REFERENCES

- 1. F. S. COLLINS, The Green Algae of North America, Tufts College, Mass., 1909.
- 2 C. E. TAFT, Ohio J. Sci. 64: 272-4 (1964)
- 3. WM. C. VINYARD, Southwest. Nat. 11: 196-204 (1966).