

## LEUVENIA NATANS IN OKLAHOMA.

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*Leuvenia natans* was described as a new genus and new species of flagellate by Gardner (1910); since then it has been included with the Heterokontae (Smith 1933, Pascher 1925). It was first discovered growing on the surface of quiet water in a shaded ravine off Lake Temescal, Oakland, California, by Professor W. J. Van Leuven Osterhout. Gardner subsequently found the organism floating in great abundance on the surface of pools near the stables at the Presidio, San Francisco. Further records are for stations in the state of California, by Smith. Apparently the organism has not been reported elsewhere.

On December 21, 1939, a bright yellow-green scum was found covering the surface of the water and floating leaves in a quietly flowing stream in the upper part of Devil's Canyon, east of Hinton, Oklahoma, in Caddo County. This canyon, as is well known, contains a 'relict' formation of *Acer saccharum* and other more typically eastern vegetation (Little 1939). The growth of the alga appeared dry, wrinkling back when pushed with the hand, and breaking up into oily flakes when lifted from the surface. A sample taken to the laboratory showed a practically pure growth of large (20-24 microns), immobile cells, ovoid to pyriform in shape, with reticulate chromatophores. An abundance of unequally ciliated zoospores was produced the following morning. A sample sent to Dr. G. M. Smith, Palo Alto, California, was verified as *Leuvenia natans* Gardner.

## LITERATURE CITED

- Gardner, N. L., 1910. *Leuvenia*, a new genus of flagellates. Univ. Calif. Publ. Botany 4:97-106, pl. 14.
- Smith, G. M., 1933. Fresh-water algae of the United States. New York: McGraw-Hill.
- Pascher, A., 1925. Die Susswasserflora Deutschlands, Osterreichs und der Schweiz. 14:30-32.
- Little, E. L. Jr., 1939. The vegetation of the Caddo County canyons, Oklahoma. Ecology 20:1-10.