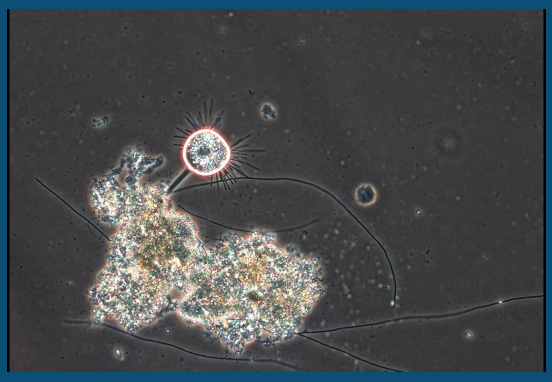
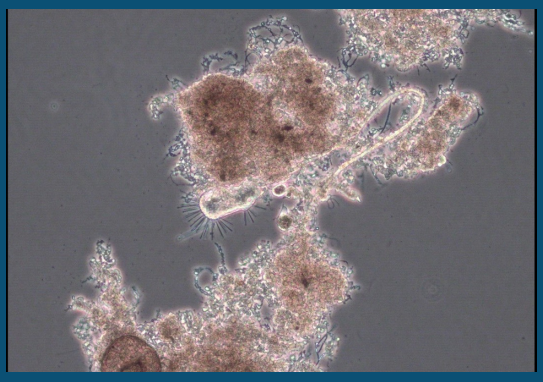
WASTEWATER BUG SPOTLIGHT
SUCTORIA

Suctoria microorganisms are one of the peak protozoan predators found in the activated sludge of wastewater treatment plants. Most suctoria are between 15 µm and 30 µm; for reference a dime is 135,000 µm thick! Although they are relatively uncommon, the presence of suctoria often indicates a healthy microorganism biomass, good oxygen conditions, and very low biochemical oxygen demand, all of which are characteristics of excellent wastewater treatment conditions.

Unlike most other ciliates found in the treatment process, suctorians prefer to feed on the cytoplasm of other protozoans. They accomplish this with the help of the hollow spines their bodies are covered in, called haptocysts. When the haptocysts come in contact with other microorganisms they secrete toxic enzymes which adhere to the prey's body. Once its prey has been immobilized, the aptly named suctoria sucks out its prey's cytoplasm which is then converted into energy.





Suctoria found under the microscope at the City's El Estero Water Resource Center, magnified x100

El Estero
WATER RESOURCE CENTER

For more information on wastewater treatment visit www.SantaBarbaraCA.gov/ElEstero