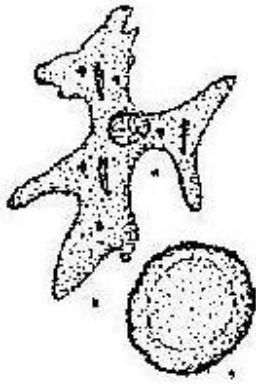


BACTERIA FOUND IN WASTEWATER



AMOEBOIDS

Amoeboids are very flexible and absorb food through the cell walls. Amoeboids are found in abundance during a treatment plant start-up.



FLAGELLATES

Flagellates are known by their “tails” or flagella. They use this as a means of movement by whipping it back and forth. Flagellates are in abundance during periods when bacteria population is low or when there are high organic loading, or the presence of a large amount of once living material.



FREE SWIMMING CILIATES

These Ciliates are a good sign of an optimal process. They are found in abundance when there is large number of bacteria, because they use those bacteria for food. Ciliates have hair like projections which cover all or part of the cell. They use these as a means of movement, and to propel food into the cell.

BACTERIA FOUND IN WASTEWATER



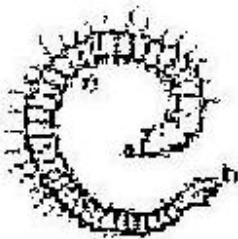
STALKED CILIATES

These Ciliates indicate an efficient and stable process. They are in abundance when lower numbers of bacteria are present and cannot provide sufficient food for the Free Swimming Ciliates.



ROTIFERS

Rotifers indicate a stable and efficient process as long as there are not too many of them. If rotifers begin to dominate the bacteria population that indicates that the sludge is getting old and/or really oxidized.



NEMATODES

Nematodes are usually present when the process is starting to decline. They can shear, break apart, the floc causing it to not settle efficiently.