Cell aggregation of the ciliate *Euplotes aediculatus* in a starved condition Toshinobu SUZAKI (Dept. Biol., Grad. Sch. Sci., Kobe Univ.)

SUMMARY

Euplotes aediculatus in Petri dish cultures was found to show cell clustering in starved conditions. During the initial stage of cell clustering, cells became excluded from patches of small "windows", with dead Euplotes cells frequently located in the center. Cell clusters were finally formed by enlargement and integration of the cell-free windows, enclosing cells into small areas. In fact, E. aediculatus cells that had been killed by freezing induced avoidance responses of the same species. The factor was water-soluble and heat-resistant. A similar avoidance response was also induced by dead cells of some other protozoan species such as other ciliates and Peranema, but not by Amoeba, Euglena, or a species of fungi.