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BBG021-P04

Room:Convention Hall

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## Relationship between coastal benthic foraminifera and its symbiotic algae

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Benthic foraminifers were collected from coastal area of Japan Sea to investigate the relationship between coastal benthic foraminifera and its symbiotic algae. Collected benthic foraminifers were cultured with sea water and seaweed in the constant temperature water tank set to 20 degrees. Living benthic foraminifers were washed with sterilized sea water, and its test was broken in order to isolate its protoplasm. The isolated protoplasm was washed with sterilized sea water, and transferred into test tube filled with a culture medium. The test tubes were put into the incubator set to 20 degrees and 12 hour light, 12 hour dark for several weeks.

The diatom *Cylindrotheca closterium* grew from *Amphistegina*, *Quinqueloculina*, and *Ammonia beccarii*, but mainly grew from *A. beccarii*. On the other hand, the diatom *Nitzschia* sp. and *Amphora* sp. grew characteristically from *Amphistegina* and *Glabratella*, respectively. It may be that the fed algae remained in the foraminiferal protoplasm, but there is a preference between foraminifera and its intracellular algae.

Keywords: benthic foraminifera, symbiotic algae, diatom