Japan Geoscience Union Meeting 2012
(May 20-25 2012 at Makuhari, Chiba, Japan)

BPT26-P04 会場:コンベンションホール 時間:5 月 23 日 17:15-18:30

三陸沖（水深 123m）から発見した*Nucinella*類を含む化学合成群集
Nucinella found in a chemosynthetic community off the Sanriku coast, northeastern Japan at 123 m depth

ジェンキンズ ロバート [1*], 北村 晃寿 [2], 天野 和孝 [3]
JENKINS, Robert[1*], KITAMURA, Akihisa[2], AMANO, Kazutaka[3]

[1] 横浜国立大学環境情報研究院, [2] 静岡大学理学部地球科学教室, [3] 上越教育大学学校教育研究科地学教室
[1]Graduate School of Environment and Information Sciences, Yokohama National University, [2]Institute of Geosciences, Faculty of Science, Shizuoka University, [3]Department of Geosciences, Joetsu University of Education

Nucinellids are very small bivalves, generally less than 5 mm in length, related to the Solemyidae, which are typical chemosymbiotic bivalves. Reid (1990) and Amano et al. (2007) hypothesized, on the basis of the Nucinellidae's gutless state and their occurrence in Cretaceous cold-seep deposits, that they have chemosynthetic bacteria in their body. This hypothesis has been partially confirmed by Oliver and Taylor (2012). They found bacteria-like microstructures in their gills. But it has still not yet been fully confirmed that the Nucinellidae have chemosynthetic bacteria or not.

We recovered many dead shells of *Nucinella* sp. withliving chemosynthetic lucinid and thyasirid bivalves from the sea off the Sanriku coast at a depth of 123 m during the Tansei-maru (JAMSTEC) cruise KT-11-17 in the summer of 2011. The finding indicates that the Nucinellidae might be a member of chemosynthetic communities even in the Recent, not only in the Cretaceous. Our finding supports the hypothesis that the Nucinellidae have chemosynbiotic bacteria.

キーワード: クルミガイモドキ類, 原鰓類, メタン湧水, 冷湧水, 共生, 三陸沖
Keywords: Nucinellidae, methane seep, cold seep, symbiosis