Molluscan shell assemblages in neritic sediments in the Japan Sea off Nou, Itoigawa City, Niigata Prefecture, Japan

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Molluscan shell assemblages in neritic sediments off Nou (Itoigawa City, Niigata Prefecture, Japan) in the Japan Sea were analyzed for elucidating the taphonomic processes of molluscan shells. Molluscan shells were collected from 5 m to 150 m depth of seabed off Nou in the Japan Sea in 1999 by a dredge (ORI type) of R/V Kubiki (19t) belonging to the Niigata Prefectural Marine Senior High School. Dredging was performed for 5 minutes at each site and a total of 60 samples were collected. The samples were fixed by 10% formalin at once and then were reserved in 70% 2-propanol dilutions. Molluscan shells were sorted out from the samples and were dried at room temperature in Laboratory. The species list of each sampling station was made, and then species composition of each sampling station was compared.

The species composition of molluscan shell assemblages exhibits a gradual change according to the latitude in the Japan Sea (Nishimura 1968). The zoogeographical position of Nou is under a warm temperature area of the Japan Sea. The bottom of the sea off Nou is classified by molluscan species composition into two or three groups. These groups have some relations to environment factors; water depth, character of bottom sediment, seasonal variations of sea water temperature and water current orientations of the warm Tsushima Current. The comparisons in distribution between living molluscan species and their dead shells indicate that the shells are transferred from their habitat to different sites.

References

Nishimura, S, 1965, The zoogeographical aspects of the Japan Sea I, *Publications of the Seto Marine Biological Laboratory*, **13**, 35-79.