

BIOGEOGRAPHICAL CHARACTERISTICS OF THE ORDOVICIAN CEPHALOPODS FROM KOREA

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The Cambro-Ordovician Joseon Supergroup is widely distributed in Kangweondo, South Korea. The Ordovician interval of the supergroup is rich in cephalopod fossils. It is divided into the Maggol, Jigunsan, and Duwibong Formations. The Ordovician fauna from Korea shows the strongest affinities with that from North China. Of 34 genera recognized in the Korean Ordovician formations, 24 genera are also known from North China. Broadly speaking, the Korean cephalopod fauna is also closely related to those of Balto-Scandinavia, North America, Manchuria, and Siberian Platform.

The cephalopod fauna of the Maggol Formation shows the strongest affinity with that of South Manchuria in having such common genera and species as *Polydesmia*, *Manchuroceras*, *Wutinoceras robustum*, and *Kogenoceras nanpiaoense*. In addition, three species, *W. robustum*, *M. nakamense*, and *K. nanpiaoense* in the Maggol fauna are known from the Setul Limestone in Thailand and Malaysia (Stait *et al.*, 1987).

The Jigunsan cephalopod fauna characterized by orthoceroids and endoceroids is entirely different from that of Manchuria which comprises many actinoceroids. This fauna shows an affinity with those of North China and the Balto-Scandinavia region. The Hawnggho fauna in North China shares 13 common genera with this fauna. Especially, the common occurrence of *Kotoceras*, *Centroonoceras*, *Leptoplathmoceras*, *Stereoplasmoceras*, and *Wenmanoceras* indigous to both regions strongly supports the biological affinities between them. The Middle Ordovician cephalopod faunas of the Oslo region, Norway and the Baltic Sea comprise many lituitids and some *Sactorthoceras* and *Stereoplasmoceras* in which 11 genera are common with the Jigunsan fauna (Sweet, 1958).

The Duwibong cephalopod fauna characterized by actinoceroids has the strongest affinity with that of South Manchuria, based on the common occurrence of *Armenoceras*, *Ormoceras*, *Hoeloceras*, and *Selkirkoceras*. Previous works in the Arcto-America region suggest North America to be the mecca of actinocroid cephalopods. The Arcto-America fauna migrated and extended to East Asia through the Siberian Epicontinental Seaways. The seven genera of actinoceroids and *Tofangoceras* in the Duwibong fauna are also reported in Siberian Platform (Balashov, 1962). In conclusion, the Duwibong cephalopod fauna represents Arcto-American faunal elements.

Balashov, Z. G. 1962. Leningrad University Press, 131 p, 52 pls.

Stait, B., Wyatt, D., and Burrett, C. F. 1987. Neues Jahrbuch für Geologie und Paläontologie Abhandlungen, vol. 174, no. 3, p. 373-391.

Sweet, W. C. 1958. Særtrykk av Norsk geologisk tidsskrift, bd. 38, h. 1, 178 p, 21 pls.

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