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## 북극 바렌츠해에 서식하는 중형저서생물에 관한연구

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Meiofauna community was surveyed in the Arctic Ocean. Sediment samples were collected from six stations in the east Barents Sea and from five stations in Kongsfjorden, Svalbard during July 2002.

Eight taxa of meiofauna were identified in the Barents Sea. Meiofauna abundance ranged from 245 to 906 indiv.10cm<sup>-2</sup> (mean 580 indiv.10cm<sup>-2</sup>) and total biomass varied from 23 and 404  $\mu$ gC10cm<sup>-2</sup> (mean 184 $\mu$ gC10cm<sup>-2</sup>) in the Barent Sea. Nematode predominated in meiofauna comprising 95.2% of total abundance and 66.4% of biomass. Copepods, polychaets and sarcomastigophonans were also dominant in the study area.

Nine taxa of meiofauna were identified in Kongsfjorden. Meiofauna abundance ranged from 103 to 513 indiv.10cm<sup>-2</sup> (mean 292 indiv.10cm<sup>-2</sup>) and biomass varied from 13 and 176  $\mu$ gC10cm<sup>-2</sup> (mean 94 $\mu$ gC10cm<sup>-2</sup>) in the Kongsfjorden. Nematodes predominated in meiofauna, comprising 64.1% of abundance and 64.3% biomass. Copepods, polychaets, and kinorhyncha were also dominant in the study area.

The meiofauna abundances from both the study areas well match with the previous reports from the various regions including the temperate areas. However the occurred taxa in the present study are only a half comparing with the reports from temperate zone. Meiofauna abundance, biomass, diversity index and species richness were much higher than in the coastal which were strongly affected by fresh water run off in the Barents Sea. The stations affected by chlorophyll had high abundance and biomass, but low diversity index and species richness in Kongsfjorden.