often overlooked and many species are undescribed, often at the genus or higher taxon level. As a result, they represent a major source of unknown biodiversity in the deep sea. We studied the diversity and vertical distribution of these delicate, often-fragmentary organisms in sediment samples (0-6 cm layer) collected from 3 sites in the eastern part of the Clarion-Clipperton polymetallic nodule field (sub-equatorial NE Pacific) during the 1997 cruise of Interoceanmetal Joint Organization (IOM). A total of 68 morphotypes was recorded (10-44 per station), indicating an extremely diverse assemblage. Although most morphotypes were found in the upper 1.5 cm, deeper sediment layers also supported fairly diverse komokiacean assemblages. A few species attached to nodule surfaces have been described previously, but ours is the first study of these protists in sediments from an abyssal nodule field. It contributes to our baseline knowledge of abyssal communities in an area targeted for future commercial nodule mining operations.

DIVERSITY AND LARGE-SCALE BIOGEOGRAPHY OF PARAMESOCHRIDAE (COPEPODA, HARPACTICOIDA) IN SOUTH ATLANTIC AND ANTARCTIC ABYSSAL PLAINS

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Within the framework of the international project CeDAMar, the deep-sea campaigns DIVA and ANDEEP in 2000, 2002 and 2005 to the southern Atlantic Ocean (Guinea, Angola and Cape Basin) and the Southern Ocean (Weddell and Scotia Sea) yielded meiofauna samples from 21 stations. At depths down to 5655 m, a total of 512 cores from 83 hauls were collected. In the present study, all 310 adult Paramesochridae Lang, 1944 (Copepoda, Harpacticoida) were analyzed at the taxonomic-morphological level. They belonged to 19 species and four genera (Kliopsyllus Kunz, 1962, Leptopsyllus T. Scott, 1894, Paramesochra T. Scott, 1892 and Scottopsyllus Kunz, 1962). Eleven species were restricted to single regions, whereas the others showed a much wider distribution. For example, the two known species, K. andeep Veit-Köhler, 2004 and K. diva Veit-Köhler, 2005, were both collected from Guinea, Angola and Weddell Abyssal Plain, and K. new sp. 1 occurred in all three West-African basins. For the first time, this study provides insights into the large-scale biogeography of deep-sea harpacticoids and indicates that distribution ranges might span across South Atlantic and Antarctic abyssal plains.

POLYCHAETE MORPHOLOGICAL AND GENETIC DIVESITY IN THE EQUATORIAL PACIFIC

Paterson, Gordon; Glover, Adrian; Zoology, Natural History Museum Auditórium, UK
Smith, Craig; Atimara, Iris; Oceanography, University of Hawaii, USA
Foster, Peter; Dyall, Pat; Zoology, Natural History Museum Auditorium, UK
Galeron, Joelle; Menot, Lenaik; DOP, IFREMER, France
Boeggemann, Markus, University Osnabruck, Germany

Both morphological and molecular methods were used to assess species diversity and distributions within the Clipperton Clarion Fracture Zone managese nodule fields in the Pacific. The aim of the study was to provide biogeographic information to inform management plans for the sustainable exploitation of managese nodeules from this region. The species studied came from five polychaete families - Cirratulidae, Glyceridae, Lumbrineridae, Spionidae and Sylldae. This poster will present the latest results.

DIVERSITY BEYOND THE SPECIES RICHNESS? HOW TO DEAL WITH LESS ABUNDANT TAXA OF THE DEEP SEA - LIKE LORICIFERA?

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There is no doubt that the most abundant taxa of deep-sea meiofauna are Nematoda (88-90%) and Harpacticoida (8-9%). It is therefore no suprise that most studies of deep-sea meiofauna diversity deal with these two taxa. Other animal groups like Loricifera seem to have such a low distribution that it is hardly worth mentioning. The investigation of Loricifera from North Atlantic deep-sea basins revealed that this group in average makes up no more than 0.2-0.3% of the total deep-sea meiofauna in the analysed samples (DIVA-1 in 2000 and DIVA-2 in 2005). Remarkably, they are present with a few specimens in each samples, despite this low abundance. However, in a few cases Loricifera suddenly start being the second most abundant taxon of the meiofauna! Reasons for this may be found in their life cycles. The number of different life history stages of deep-sea Loricifera is impressive and their complex life cycles are surprising in response to small-scale changes of environmental conditions. Instead of dealing exclusively with species numbers, also the variety of life history stages of deep-sea Loricifera can be used for aims of biodiversity research.