

## **Biodiversity data of the Southern Ocean: The 'ANT'PHIPODA' project**

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In the benthic and pelagic ecosystems of the Southern Ocean, the amphipod crustaceans constitute a key group in terms of species richness and niche diversity as well as in terms of trophic fluxes.

To contribute to document and understand the Southern Ocean biodiversity and to assess the ecofunctional role of the crustacean taxocoenoses, the 'ANT'PHIPODA' project was initiated in the framework of the SCAR programme 'Ecology of the Antarctic Sea Ice Zone' and the Belgian Scientific Research Programme on the Antarctic (OSTC).

The 'ANT'PHIPODA' project includes the development of a 'Biodiversity Reference Centre' for Antarctic Amphipoda at the Royal Belgian Institute of Natural Sciences, Brussels.

This reference centre comprises three complementary elements:

a comprehensive database on taxonomy, distribution and bio-ecology of all marine amphipod species of the Antarctic and Subantarctic regions south of 40°S;

extensive reference collections;

a specialized documentation.

The 'ANT'PHIPODA' database, developed in ACCESS, includes the following data:

taxonomy: classification, synonymy, type locality, types specimens location (860 spp, 2210 names);

distribution: more than 8000 species occurrence records from collections and literature; 1124 collecting stations documented from 118 expeditions, a hierarchically organised gazetteer with more than 20 000 geographic localities to facilitate information retrieval and mapping applications);

bio-ecological characteristics of species (life style, habitat, trophic type, abundance, size,...);

collections (120 000 specimens inventoried on a total of 400 000 specimens);

bibliography: complete bibliographic references on Southern Ocean amphipod species and numerous references on amphipods, crustaceans in general, Antarctic benthos and marine ecology (12000 references with a few hundred thematic, taxonomic and geographic coded keywords).

The database is intended to be mostly used for biodiversity research (taxonomy and systematics, biogeography, ecology, biology), museum collection management and exploitation, information for conservation policy and biodiversity monitoring.

The 'ANT'PHIPODA' reference centre is supported by the 'Antarctic Amphipodologist Network (AAN)', an international team of 13 specialists engaged in the taxonomic revision of the Antarctic amphipod fauna, the preparation of conventional identification guides and web-based interactive keys and the synthesis of the Antarctic amphipod biogeographic and ecological traits.

The ANT'PHIPODA database will be integrated with two other Antarctic marine biodiversity databases - NEMASLAN, Biodiversity of Antarctic Nematodes (Univ. Ghent) and ANTARCTIC ECHINOIDS, an interactive database (Univ. Dijon & Brussels) - to form a common portal on Antarctic Marine Biodiversity as the nucleus of the SCAR Marine Biodiversity Information Network.