5a Summary

The Isopoda from the Spanish Expedition "DIVA-Artabria 1" along a bathymetric transect with stations between 102 and 1140 m depth off northern Galicia were comprehensively investigated taxonomically and zoogeographically. The material of two consecutive years of sampling yielded 690 specimens belonging to at least 36 species from 14 families. 32 species could be identified. The others were indeterminable stages (Cryptoniscium larvae of Bopyridae, isolated females and Praniza larvae of Gnathiidae) or too poorly preserved to allow a determination at species level. The material contained 9 species that are new to science (Munna heikeae n. sp.; Notoxenoides nudicollis n. sp.; Austrofilius teiresias n. sp.; Ianthopsis maximi n. sp.; Lipomera (Lipomera) celtica n. sp.; Bathybadistes penthesilea n. sp.; Ischnomesus brenkei n. sp.; Caecognathia ovalifrons n. sp.). The new species are described in this work and 5 previously insufficiently documented species are redescribed (Pseudarachna hirsuta (SARS, 1864); Munnopsoides eximius HANSEN, 1916; Macrostylis longiremis (MEINERT, 1890); Metacirolana hansenii BONNIER, 1896; Gnathia dentata SARS, 1882). The scientific illustrations of the described species were prepared with a new digital drawing method (COLEMAN 2003, 2006) which was further improved by the implementation of brush tool libraries for various setae. The zoogeography of all Isopoda determined to species level is summarized with distribution maps using source data from literature. Furthermore, the species composition of the examined area off northern Galicia is compared with previously undetermined additional material from the Great Meteor Seamount (expedition M42/3) and the Mediterranean Sea (expeditions M25/1; M40/3). The isopod faunal composition mostly corresponds to a typical North East Atlantic faunal community. 63% of the species have been recorded from the North Sea or from the shelf around the British Isles. Species occurring also in the West or South Atlantic or in the Pacific Ocean generally have a wide geographical range with distribution areas that are supposed to be more or less continuous (exception: Natatolana borealis). The ancinid Bathycopea typhlops is the only species with a cosmopolitan distribution in the material. Reliable statements on endemism are not possible due to the fragmentary nature of the data, yet it is possible that the new species and the janirelld Janirella bessleri CHARDY, 1975 (previously recorded only from North East Spain) are endemic for the coast of northern Spain. 28% of the species are also present in the eastern Mediterranean Sea, which is of higher salinity, 16% of the species have been recorded from the Baltic Sea with low salinity. This and the bathymetric distribution of the species lead to the assumption that neither differences in salinity nor pressure of the water column but instead stenothermy and interspecific competition are the main limiting factors for the horizontal and vertical distribution of the deep-water species examined herein.