

Crinoidea and Holothuroidea (Echinodermata) of the abyssal Angola Basin—Results of the DIVA-1 expedition of FS "Meteor" (Cruise M48/1)

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Abstract

Agassiz trawl and epibenthic sledge samples taken at abyssal depths in the Angola Basin (south-eastern Atlantic Ocean) during the expedition DIVA-1 with FS "Meteor" in July 2000 yielded a rich variety of Echinodermata: inter alia one stalked crinoid (*Bathycrinus* cf. *aldrichianus* Wyville Thomson, 1876) and altogether nine holothurian species, two of which are subspecies. One of these, *Achlyonice longicornis* **spec. nov.**, is new to science, while all others have been described earlier: *Deima validum validum* Théel, 1879, *Psychropotes semperiana* Théel, 1882, *Peniagone purpurea* (Théel, 1882), *Molpadiodemas atlanticus* (R. Perrier, 1898), *Molpadia liska* Pawson, 1977, *Protankyra brychia* (Verrill, 1885), *Siniotrochus myriodontus* Gage & Billett, 1986 and *Neolepidotrochus parvidiscus angolensis* Bohn, 2005. All species collected are described and their known distributions are given. Finally, two crinoids and 21 holothurian species, so far known from the abyssal Angola Basin, are listed and their zoogeographical relationships are discussed.

Key words: Echinodermata; Crinoidea; Holothuroidea; South Atlantic Ocean; Angola Basin; deep-sea; taxonomy

Introduction

For a long time, the south-eastern Atlantic deep-sea remained almost unexplored (Fig. 1). The Valdivia expedition took samples in the Gulf of Guinea and along the western coast of Africa and information on the Holothuroidea collected there have been published by Ludwig & Heding (1935) and Heding (1940). Similarly to the Valdivia expedition, the Danish Deep-Sea Expedition (Galathea) explored bathyal and abyssal depths in the Gulf of Guinea and off the western coast of Africa. So far, only the elasipodid holothurians collected have been published in an excellent monograph on this group (Hansen 1975). Extensive sampling in the Cape Basin, the Angola Basin and the Guinea Basin was conducted by the French Research Institute for Exploitation of the Sea (IFREMER, Brest, France) in the course of the Walda (05–08.1971) and the Walvis (12.1978–01.1979)