Planktic Ostracodes from the Antarctic and Subantarctic Collected by the 1989-1990 Italian Antarctic Expedition

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ABSTRACT. Eleven species of planktic Ostracoda were collected by the Italian Antarctic Expedition of 1989-1990 from the region south of New Zealand in the Southern Ocean to the Ross Sea, Antarctica. Of these species, only Proceroeia rivolta n.sp. (described herein) and Gigantocypris muelleri were not recorded by Deevey (1982) from much the same area. Depth distributions are given for the more commonly encountered taxa, Alacia belgicae, A. hettacra, Boroecia antipoda, Metaconchoecia skogsbergi and M. isocheira. Much of the total Ostracoda density at each station is due to the dominance of A. hettacra at lower latitudes and A. belgicae at higher latitudes. The near identity with Deevey’s records confirms that the planktic ostracodes of far southern latitudes are now reasonably well known, at least to depths less than 1000 m.


Planktic ostracodes of the antarctic and subantarctic are being studied at the Istituto di Ecologia (University of Parma) as part of the continuing biological program of the Italian “Progetto Antartide”. Our initial work was done on samples collected in 1987-1988 mainly from the nearshore waters of Terranova Bay, the Ross Sea, in the vicinity of the Italian base. It revealed the predominance at all stations and all depths of Alacia belgicae (Mueller, 1906) in a species-poor ostracode fauna which also included Alacia hettacra (Mueller, 1906) and Metaconchoecia isocheira (Mueller, 1906) (McKenzie et al., 1990; Benassi, Naldi & McKenzie, 1992). We noted that these species are the same as those previously collected in the Ross Sea around the turn of the century (Brady, 1907; Barney, 1921).

This report presents species determinations, description of a new species, and discussion of the planktic ostracodes collected during the 1989-1990 Italian Antarctic Expedition. As such, it supplements previous work on the RV Eltanin collections by Deevey (1982). Our primary data – the per sample species list, total Ostracoda density and density for each species – are available as Appendices I and II in another report (Benassi et al., 1992).