Pliocene and Pleistocene planktonic Foraminifera from Santa Maria di Catanzaro, southern Italy

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with 1 figure and 1 plate

Abstract: Seventeen species of planktonic foraminifers are described from Late Pliocene and Early Pleistocene (Calabrian) rocks cropping out near Santa Maria di Catanzaro, southern Italy. In the temperate water-mass assemblage of the Calabrian fauna, *Globorotalia tosaensis* is absent and left-coiling *Globorotalia truncatulinoides* is rare. Several Pliocene species, including *Globorotalia margaritae*, have been reworked into the Calabrian deposits. The fauna is compared with that from the type Sicilian and observations are made about Early Pleistocene biostratigraphy in southern Italy.

Introduction

Pliocene and Pleistocene foraminiferal biostratigraphy is attracting increasing attention as core coverage of the ocean floors continues to improve. This fact, together with widespread attention to stratigraphic boundary problems, accounts for the exhaustive discussions of biostratigraphic events of more than local significance pertaining to the Pliocene — Pleistocene boundary (Banner & Blow 1965, Selli 1967, Bayliss 1969, Bandy & Wilcoxon 1970, Gradstein 1970, Lamb & Beard 1972). Generally these discussions refer to plankton events in the classical marine Pleistocene deposits near Le Castella and Santa Maria di Catanzaro in southern Italy.

To date only selected planktonic foraminifera from these localities have been discussed, and the information has been summarized by Lamb & Beard (1972). In this paper the planktonic foraminiferal assemblages in five samples from the Pliocene and Pleistocene deposits near Santa Maria de Catanzaro are reviewed. Among the samples collected by M. J. Brolsma and J. E. Meulenkamp from this locality, five are thought to contain the most diverse faunas. Four of the five samples (in ascending stratigraphic order: MC 1B, 3C, 8A and 8B) are Calabrian (Early Pleistocene), while one sample (MC 11) is from a clay bed immediately below the Calabrian deposits and is considered Late Pliocene in age. The precise stratigraphical positions of the samples and sedimentological observations on the deposits are given by Brolsma & Meulenkamp (this volume).

In sample MC 11 the washed residue (>125 μ) consists wholly of well-preserved foraminifers, most of which are planktonic. In the four Calabrian samples, however, the assemblages are preserved less well and mixed with much clastic detritus.

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