

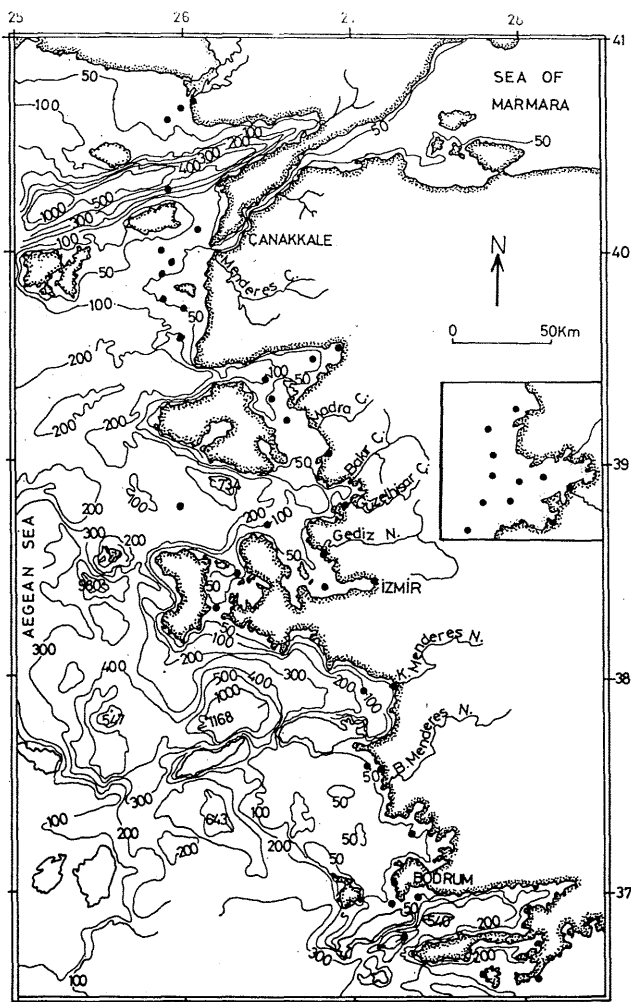
## A Preliminary Study of the Principal Recent Sediment Types along the Eastern Margin of the Aegean Sea

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Forty-six surficial sediment samples collected during the oceanographical cruise of the R/V Bilim in Eastern Aegean Sea in 1987, from depths ranging between 12 and 640 m (Fig. 1), were subjected to granulometric, carbonate, organic carbon, and optical investigations. The main goal is to provide data that contribute to increase the knowledge on sedimentary processes in this poorly known part of the Aegean Sea.

Preliminary results suggest that - on the basis of biogenic  $\text{CaCO}_3$  content - four main types of Recent sediments overlay the floor of the Eastern Aegean Sea, namely very low-calcareous (< 5 %  $\text{CaCO}_3$ ), low-calcareous (5-25 %  $\text{CaCO}_3$ ), calcareous (25-50 %  $\text{CaCO}_3$ ), and high-calcareous (50-75 %  $\text{CaCO}_3$ ) sediments. Carbonate components of sediments are largely made up of benthonic-shelly materials mostly occurring in the surroundings of Gökçeada Island-Straits of Dardanelles, south of Bozcaada Island, Chios Island-Çeşme Peninsula, and Bodrum Peninsula-Kos Island.



Most of the organic carbon values of sediments (0.30-0.70 %) are comparable with those found elsewhere in the Eastern Mediterranean (ERGİN et al., 1988), but somewhat lower than those from the Sea of Marmara (ERGİN and EVANS, 1988). The organic carbon contents of the Aegean Sea sediments of this study, in general, reflect low biogenic production here, compared to sediments from highly productive Marmara waters. Exceptionally high organic carbon concentrations (up to 3.50 %) occurred at or near river mouths, and also at sites with high sea-grass communities.

Among the biogenic components, the occurrence of calcareous algae "Lithothamnium" is characteristic, especially off the coasts of Bozcaada Island and in areas of between Kos Island and Bodrum Peninsula.

Sediments are composed of materials ranging in grain size: from silty clay to gravelly-muddy sand. Mud is widely distributed off the river mouths (areas of high terrigenous input) and in the embayments (areas of low energy conditions), particularly in Edremit and İzmir Bays, as well as, the Karaburun Peninsula-Lesbos Island-Chios Island triangle.

### REFERENCES.

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