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## DISTRIBUTION OF COPEPODS IN AEGEAN SEA DURING MARCH 2012

S. Besiktepe<sup>1</sup>, T. M. Sever<sup>2</sup>, S. T. Besiktepe<sup>1</sup><sup>1</sup>Dokuz Eylul University, Institute of Marine Science and Technology, Izmir, Turkey,  
sengul.besiktepe@deu.edu.tr<sup>2</sup>Ege University, Faculty of Fisheries, Izmir, Turkey

Horizontal and vertical distributions of copepods were investigated based on zooplankton samples collected during March 2012 at 10 stations in Aegean Sea. A total of 83 copepod species were identified. Copepods dominated the zooplankton assemblages at almost all stations. More than 70% of copepods were found in the upper 100 m layer. Using cluster analysis, five groups of samples differing on distribution of adult and copepodite stages of copepods and hydrological characteristics were determined.

*Keywords:* Zooplankton, copepods, Aegean Sea

Horizontal and vertical distributions of copepods were investigated during March 2012 in Aegean Sea. Samples were collected by using WP2 net with 100  $\mu\text{m}$  mesh size from different depth strata at 10 stations (Fig.). Flowmeter was used to estimate filtered volume.

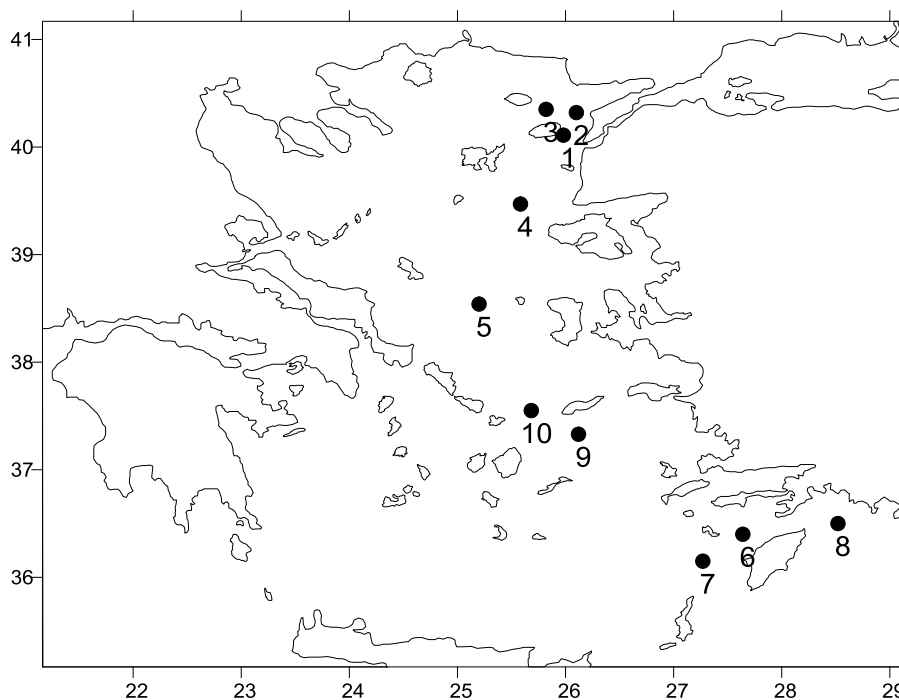


Fig. Locations of sampling stations

Minimum ( $2513 \text{ ind.}\cdot\text{m}^{-3}$ ) and maximum ( $14479 \text{ ind.}\cdot\text{m}^{-3}$ ) values in zooplankton abundance were observed in the northern part where under the influence of the Black Sea waters. The average abundance was 5262 and 4673  $\text{ind.}\cdot\text{m}^{-3}$  in the center and the southern part of the Aegean Sea, respectively. Copepods dominated the zooplankton assemblages at almost all stations, other dominant groups were crustacean larvae/nauplii, appendicularians, cladocerans, chaetognaths and bivalve larvae. Most of the zooplanktonic organisms were observed in the first depth strata where includes beginning of seasonal thermocline.

A total of 83 copepod species were identified during the sampling period. The contribution of *Clausocalanus* spp. to the total copepod abundance was > 9% at almost all station although the contributions of species varied by stations. *Acartia clausi* was one of the most common 4 species in the northern part and the contribution of *Centropages typicus* to St 2 and St 3 was 40 and 45%, respectively. *Oithona similis*, *O. plumifera*, *Ctenocalanus vanus*, *Paracalanus nanus*, *Oncaea obscura* and *O. media* were the common species observed during the sampling period. More than 70% of copepods were found in the upper 100 m layer. Cluster analysis was performed on adult and copepodite stages of copepods and 5 groups of samples were determined at 48% similarity level: group A, upper layers of St 2 and St 3 that under the influence of the Black Sea waters; group B includes only St 1, with coastal and epi- and mesopelagic species; group D, epipelagic (0–100 m) layers of the stations; group C, more heterogeneous group includes intermediate layers and the deep layers of some stations; group E, deep waters of the Rodes, these waters have Levantine Deep Water characteristics.

## РАСПРОСТРАНЕНИЕ КОПЕПОД В ЭГЕЙСКОМ МОРЕ В МАРТЕ 2012 ГОДА

Ш. Бешиктепе<sup>1</sup>, Т. М. Север<sup>2</sup>, С. Т. Бешиктепе<sup>1</sup>

<sup>1</sup> Университет 9 сентября, Институт морских наук и технологий, Измир, Турция,  
sengul.besiktepe@deu.edu.tr

<sup>2</sup> Эгейский университет, факультет рыболовства, Измир, Турция

Исследовано горизонтальное и вертикальное распределение копепод на основе зоопланктонных проб, собранных в марте 2012 года на 10 станциях в Эгейском море. 83 вида копепод были идентифицированы. Они доминировали в зоопланктонном сообществе почти на всех станциях. Более 70% копепод были обнаружены в верхнем 100-метровом слое воды. С помощью кластерного анализа выделены пять групп проб, различающихся распределением взрослых и личиночных стадий копепод и гидрологическими характеристиками.

*Ключевые слова:* зоопланктон, Copepoda, Эгейское море