

# Temporal and Spatial Variations in the Species Composition, Distribution, and Abundance of Copepods and Cladocers in Keban Dam Lake, Elazığ (Turkey)

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**Abstract:** The composition, distribution and abundance of copepods and cladocers collected from 20 m depth to the surface waters from the Keban Dam Lake were examined. Copepods and cladocers were collected monthly at 6 designated stations from August 2002 to July 2003. In the Keban Dam Lake, 3 species from 2 families of copepods and 4 species from 4 families of cladocers were recorded. The average abundance of copepods was  $14.49 \times 10^5$  individuals/1000 m<sup>3</sup>, the average abundance of cladocers was  $30.49 \times 10^5$  individuals/1000 m<sup>3</sup>. *Cyclops vicinus* (67.3%) were the most abundant copepod species. *Diaphanosoma mongolianum* (44%) and *Daphnia cucullata* (43.86%) were the most abundant cladoceran species. Two-way ANOVA analysis of total copepod and cladocers showed a significant seasonal effect (F=8717, P<0.001 for copepod; F=22970.98, P<0.001 for cladocer), but not between stations (F=0.437, P>0.05 for copepod; F=0.419, P>0.05 for cladocer).

**Key Words:** Cladocers, copepods, seasonal variation, Keban Dam Lake