PHYLOGEOGRAPHY OF THE MARINE ISOPOD *SPHAEROMA SERRATUM* (CRUSTACEA, ISOPODA, SPHAEROMATIDAE) INFERRED FROM MITOCHONDRIAL AND NUCLEAR GENE SEGMENTS

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A phylogeographic analysis of the marine isopod *Sphaeroma serratum* Fabricius, 1787 was carried out to test for potential genetic differentiation among populations and geographical structure. The species is distributed widely in the shallows of the tidal zone and is characterized by low active dispersal ability and no early dispersal stages. The populations analysed were collected from western and central Greece and from the Aegean. Three molecular markers (two mitochondrial and one nuclear) were selected for PCR amplification and sequencing. The resulting sequences were used for statistical and phylogenetic analyses using three different algorithms (Neighbor Joining, Maximum Parsimony & Bayesian Inference). High levels of genetic divergence among *S. serratum* populations have been found, but no morphological variation. Divergence patterns do not show any clear geographical structure, but seem instead to relate to different salinity levels among sampling regions. Contrary to expectation, this cosmopolitan 'species' in fact seems to constitute a group of sibling species.