

**POPULATION STRUCTURE OF *Paracentrotus lividus* Lamarck:
A PRELIMINARY ASSESSMENT IN TWO AREAS OF THE
AEGEAN SEA**

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The common sea urchin *Paracentrotus lividus* Lamarck, 1816 is an edible species of commercial importance, overexploited in several areas of the Mediterranean. The present work aims to study the population structure of this species in two areas of the Aegean Sea. Field sampling took place along the coastline of Kavala Bay (North Aegean) and of Astypalaia Island (South Aegean). Samplings involved the estimation of population density and dispersion pattern with the method of randomly placed frames (10x1 m²) and randomly collected specimens for biometry. Overall 800 individuals of *P. lividus* were collected their diameter (D), height (H) and weight (W) were measured. Mean population density was found higher in Kavala Bay than in Astypalaia (18 indiv. / m² and 14 indiv. / m² respectively). On the other hand, size-frequency analysis revealed that the above biometric characters had significantly higher values in the South Aegean populations. Biometric relations D/H and D/W followed negative allometry, with the exception of D/W in Kavala Bay which was found isometric. These preliminary results indicated that *P. lividus* stocks may be differently structured in the two sub-areas of the Aegean. The higher population density of smaller individuals recorded in the North Aegean could probably be attributed to both the fishing pressure and the increased productivity of this area.