

Effect of drift kelp on the spatial distribution pattern of the sea urchin *Tetrapygus niger*: a geostatistical approach

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Abstract

Geostatistical analysis was used to investigate the effect of drift kelp on the spatial distribution of the sea urchin *Tetrapygus niger*. The positions of all sea urchins were mapped in four experimental plots in the rocky intertidal zone of the central Chilean coast. When drift macroalgae were added, the sea urchins left the substratum irregularities, increased in number inside the experimental plots, and tended to form a dense aggregation around the kelp. After the drift macroalgae was removed, the aggregations disappeared and the sea urchins returned to the depressions and/or interstices of the substratum. The results suggest that the influx of drift kelp is the triggering factor in the formation of dense aggregations of this species.