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## Growth and survival response of the Catarina scallop *Argopecten circularis* (Sowerby) to stocking density and length or culture period

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Growth and survival of the Catarina scallop, *Argopecten circularis* (Sowerby), were determined in relation to stocking density and length of culture period. Data were analysed by means of the von Bertalanffy growth equation and the weight-length allometric relationship. A mortality equation was empirically derived from the experimental data. Stocking density significantly affected both growth ( $P < 0.05$ ) and mortality parameters ( $P < 0.01$ ). The coefficients for the weight-length relationship, however, were not affected by stocking density. Mortality was highly variable, both during the culture period and between the different stocking densities. Two mortality patterns were identified. One was associated with post-spawning mortality and lower stocking rates. The other occurred at high densities where increased temperatures and overstocking provoked high mortalities and extremely divergent survival responses. The results showed that mortality, rather than growth, reflects more accurately the effects of density, and that better survival is not necessarily produced by stocking at the lowest rate.

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