

Intraspecific Survey on the Mortality of the
Manila clam *Ruditapes philippinarum* in
Gomso-Bay, Korea

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ABSTRACT

Density-dependant mortality and growth rate of the Manila clam *Ruditapes philippinarum* was investigated from the clam population in Gomso Bay, Korea where unusual high mortality of the clams has been reported since the early 1990's. For the experiment, four groups of clam cages were set up with a density of 2,000 clams/m² (group A), 1,000 clams/m² (group B), 500 clams/m² (group C) and 100 clams/m² (group D). Mortalities of the clams in each experimental cage were monitored biweekly from May 2001 to September 2001. A maximum mortality of group A occurred in late August and those of the other groups were observed in early September. Cumulative mortalities in each cage in September was 99% in group A, 93.2% in group B, 91.2% in group C and 88% in group D. Mean shell length increases per month were 0.67 mm in group A, 1.33 mm in group B, 1.63 mm in group C and 1.71 mm in group D. The infection intensity of the protozoan parasite *Perkinsus* sp. coincided with the mortality, and the pathogenesis of the parasite in the Manila clam was histologically observed.