

BACTERIA IN GREEN MUSSEL *PERNA VIRIDIS* (L.)
AND ITS ENVIRONMENT

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ABSTRACT

Pathogenic bacteria and bacterial indicators were isolated from green mussel and sea water collected at Muara Kamal, Jakarta Bay.

Samples were collected at five lift-nets on two occasions in 1997. Two size classes of mussels (< and > 5 cm shell length) were analysed. Higher number of *Shigella* sp. and *Escherichia coli* but not *Salmonella* sp. and *Vibrio* sp. were found in large mussels. Counts of *E. coli* were higher in large mussels ($24 \cdot 10^3$ MPN 100 g⁻¹) compared to small mussel ($16 \cdot 10^3$ MPN 100 g⁻¹) and sea water ($13 \cdot 10^3$ MPN 100 ml⁻¹). The number of *Salmonella* in small and large mussel were $11.6 \cdot 10^{12}$ and $0.2 \cdot 10^{12}$ cfu 100 g⁻¹ respectively. *Salmonella* sp. occurred in 10 % of the sea water samples. The number of *Shigella* sp. in small and large mussel were $4.2 \cdot 10^{13}$ cfu 100 g⁻¹ and $2.6 \cdot 10^{13}$ cfu 100 g⁻¹ respectively. *Shigella* was recorded in sea water at concentrations of $14.9 \cdot 10^2$ cfu 100 ml⁻¹. *Vibrio* sp. were rare in mussels, less than 30 cfu 100 g⁻¹. Sea water contained $1.0 \cdot 10^3$ cfu 100 ml⁻¹.